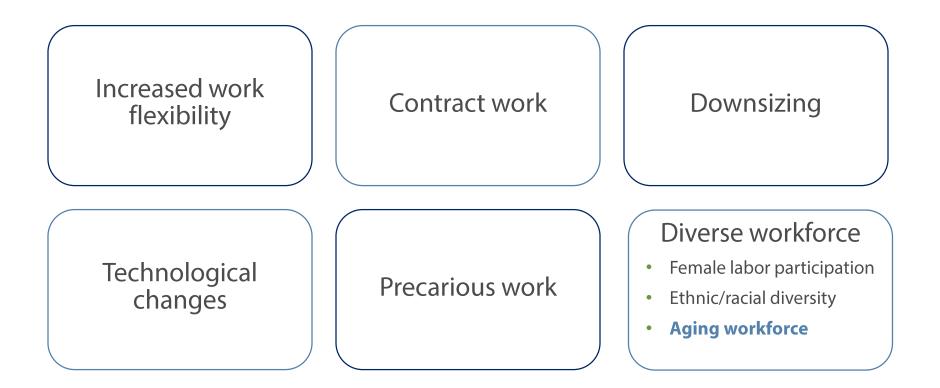
## The Changing Nature of Return to Work

Dr. Glenn Pransky University of Massachusetts Medical School Scientific Advisor, Liberty Mutual Insurance



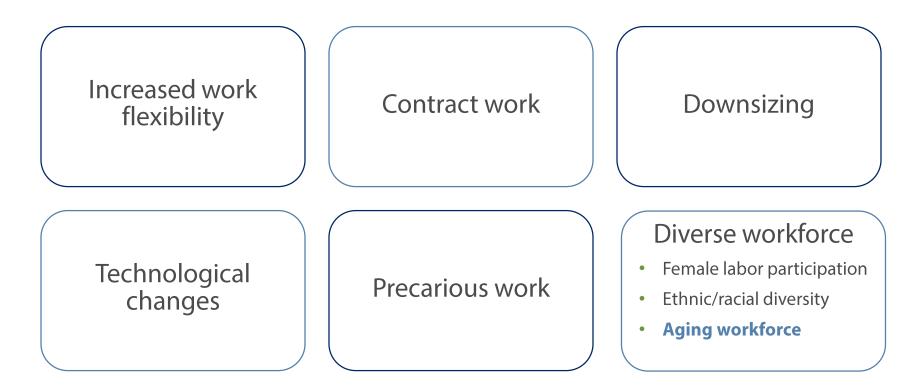


#### Changing Nature of Work – Impact on RTW



#### Your Turn

Using the Polling Feature, Select the Categories That Affect Your RTW Results



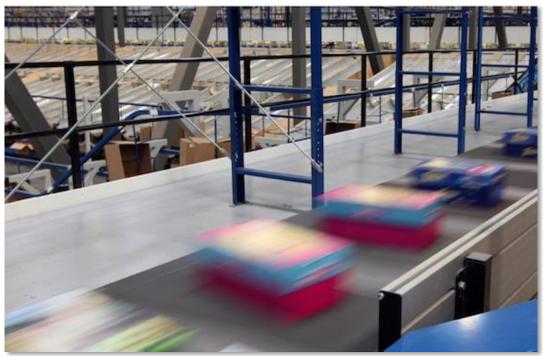
#### High-pay, Low Skill Blue Collar Jobs Are Vanishing



A worker at a steel minimill in California. Minimill technology has enabled steel plants to cut 75 percent of employees over five decades, while keeping production the same. David McNew/Getty Images

Claire Cain Miller. "The Long-Term Job Killer Is Not China. It's Automation." The New York Times. Dec. 21, 2016. https://nyti.ms/2jAJvMn.

#### ... Even Low-skill Jobs Are Threatened



Sketchers distribution center in California - fully automated

Claire Cain Miller. "The Long-Term Job Killer Is Not China. It's Automation." The New York Times. Dec. 21, 2016. https://nyti.ms/2jAJvMn.

#### In-Store Retail Is Shrinking As Well



Sears - anchor store for Valley View Center in Dallas - now all closed.

David Montgomery. "Deep in the Malls of Texas, a Vision of Shopping's Future." The New York Times. Jun. 20, 2017. https://nyti.ms/2tKvZrd.

## ...Leaving Only Those Technical Experts Needed to Install and Service the Equipment



At Eatsa, an automated restaurant chain, customers never interact with a human.

Panera Bread digital-ordering kiosks. Hollis Johnson/Business Insider.

Claire Cain Miller. "The Long-Term Job Killer Is Not China. It's Automation." The New York Times. Dec. 21, 2016. https://nyti.ms/2jAJvMn.

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#### **Changing and Vanishing Jobs**

**Evolving Postindustrial Economy** 

#### Major drivers:

Automation, AI, remote operation, 'Uber'- ization

- Health care, service jobs (food, cleaning, office support), transportation, maintenance and repair, even complex manufacturing
- Top tier: programmers, designers, mostly living in big cities; decentralized expert techs
- Many others: Low wage, multiple jobs, long hours, less security, lone work, loss of co-workers

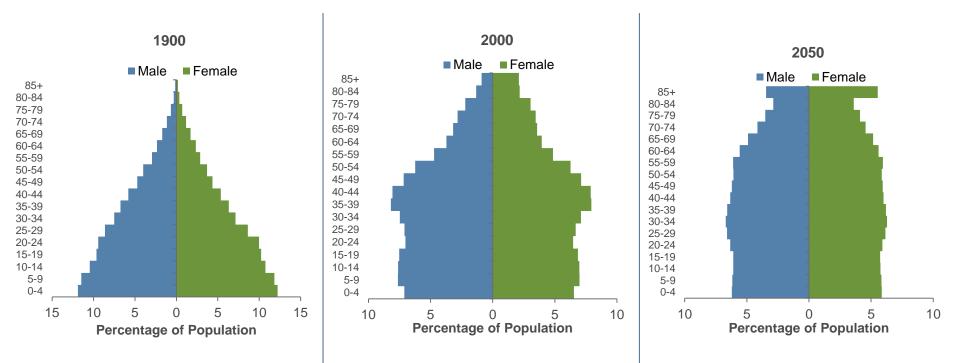






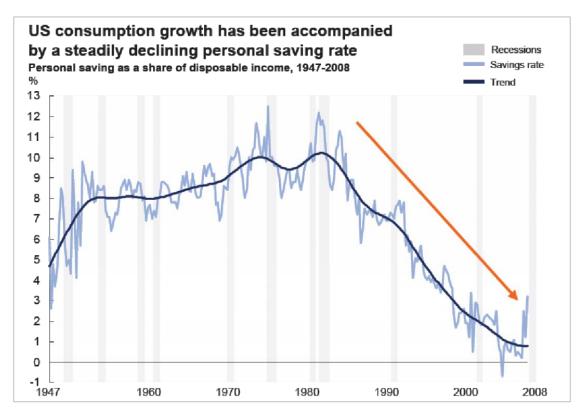


#### Aging of the Population



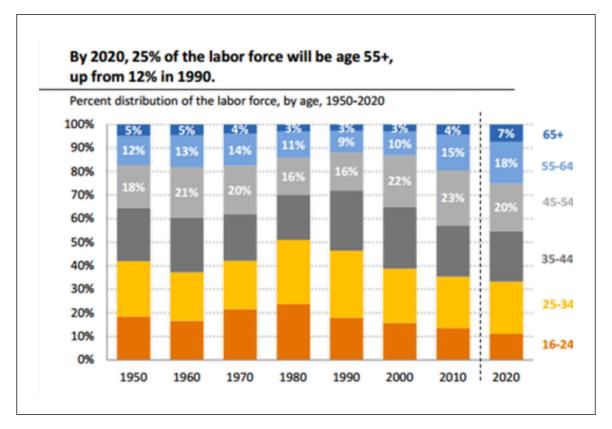
United States Census Bureau. "A Century of Population Change in the Age and Sex Composition of the Nation." Sept. 12, 2013. Adapted.

#### **Erosion of Retirement Savings**



US Bureau of Economic Analysis; McKinsey Global Institute analysis; National Bureau of Economic Research

#### **United States Labor Force**



Analysis: Stanford Center on Longevity. Source: BLS>

#### Lifestyle Issues =

Increasingly Unhealthy Workforce at All Ages

## National Health And Nutrition Survey – comparing 1988 to 2008 samples

#### ▶ Regular exercise

(> 12 times per month), age 45-65: 65% in 1988; 51% in 2008

#### Obesity among baby boomers age 45-65: 29% in 1988, 39% in 2008

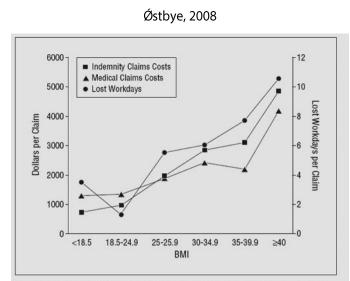
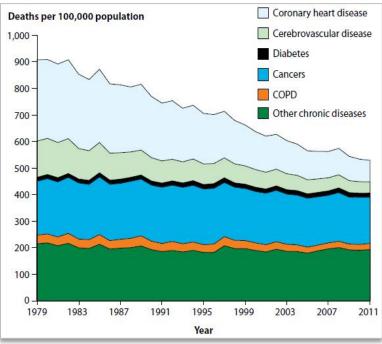
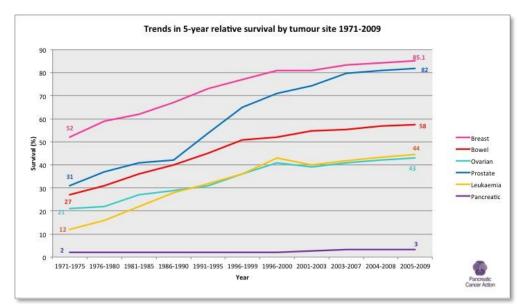


Figure 1. Mean indemnity claims costs, medical claims costs, and number of lost workdays per claim by body mass index (BMI) category. Body mass index is calculated as weight in kilograms divided by height in meters squared.

## Advances in Health Care = Longer Life

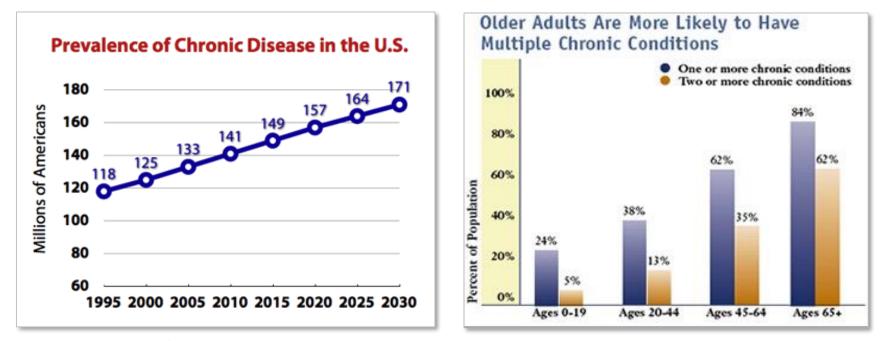


Centers for Disease Control.



Cancer research UK 2010, adapted.

#### .... But More Chronic Illness



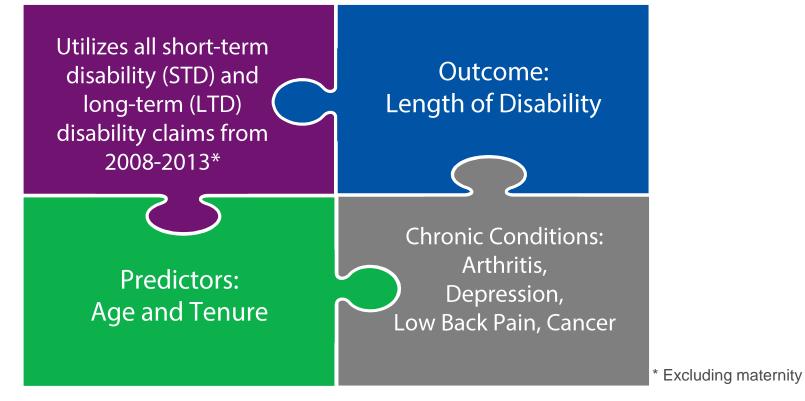
### Single-illness disability is less common – complexity is the new norm

Yi and Green. Chronic Illness in the US. RAND 2000.

#### Age and Work Disability

What is the relationship between age and the length of disability? What is the relationship between tenure and the length of disability? Is the relationship with the length of disability stronger for age than tenure or vice versa?

#### Liberty Mutual Scientific Research Projects

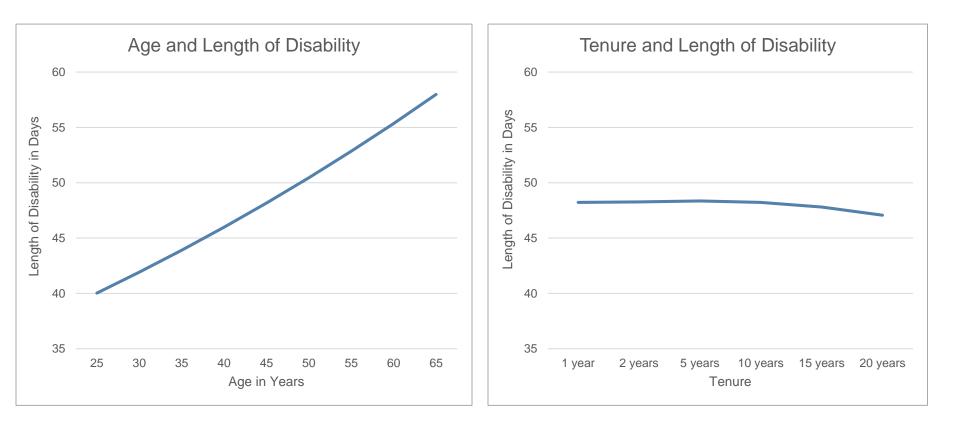


Besen, E., Young, A. E., & Pransky, G. (2015). Exploring the relationship between age and tenure with length of disability. Am J Ind Med, 58(9), 974-987. doi: 10.1002/ajim.22481.

Jetha, A., Besen, E., & Smith, P. M. (2016). Comparing the Relationship Between Age and Length of Disability Across Common Chronic Conditions. Journal of Occupational and Environmental Medicine, 58(5), 485-491. doi: 10.1097/JOM.00000000000000020.

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#### Findings



#### Age and Chronic Illness

How does the relationship between

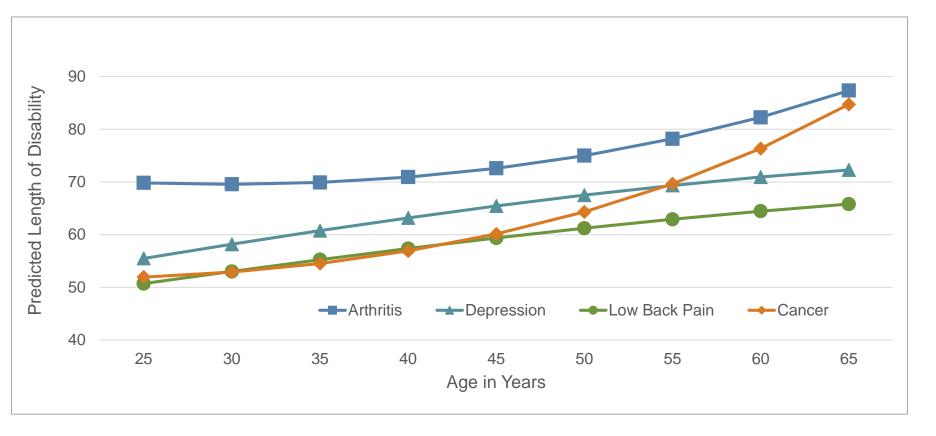
## age and disability duration vary across chronic conditions?

#### Your Turn

Using the Polling Feature, which of these diagnostic groups has the largest effect of age leading to longer disability?

- ► Arthritis
- Cancer
- Depression

#### Findings



#### **Implications for Aging Workforce**

Increased incidence of chronic disease in the workforce



Increased incidence of disability in the workforce

5.

Greater lengths of disability (esp certain conditions)

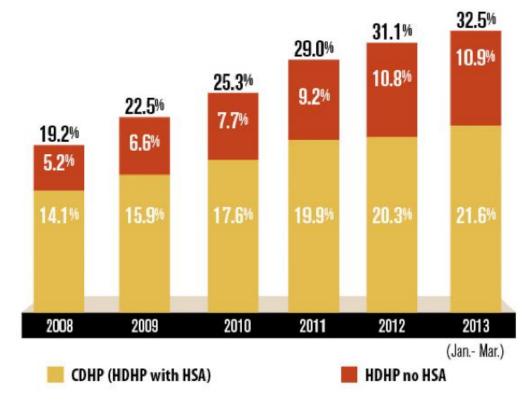


Unique age-related challenges in return to work

21

#### Getting Worse for Working People

High Deductible Health Plans

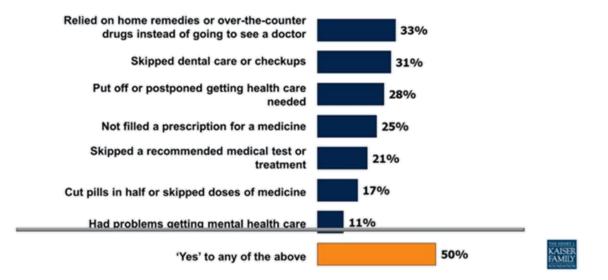


Centers for Disease Control and Prevention. National Health Interview Survey. 2013.

#### The Consequences....

#### Putting Off Care Because of Cost

Percent who say they or another family member living in their household have done each of the following in the past 12 months because of the cost:



Kaiser Family Foundation Health Tracking Poll (conducted August 10-15, 2011).

# As work and the workforce changes, our RTW strategies must also adapt.

#### The Evidence – What Works to Improve RTW

Early supportive contact with worker\*

Work accommodation\*

Contact between healthcare provider and workplace

Ergonomic work site visits

RTW policies and RTW coordinator

Labor-management cooperation

\* Most effective for older workers

Franche Et Al. Jour Occ Rehab, 2008

#### Early Supervisor Response

Survey of W/C cases in NH

Low back and upper extremity 6 weeks post claim
78% resp. rate



#### Result:

Independent additive effect of negative supervisor responses: unsupportive, blame, angry, disbelief, not to file Workplace Support, Not Med Care, Enables Workers in Poor Health to Stay at Work

 Older (45-64) employees with poor health past 12 months – MSD, CVD, cancer, sensory problems

- Essential factors that enabled them to stay on the job:
  - Changes to work stations, working times, work tasks
  - Personal coping; support from colleagues / supervisors
  - Largely informal / self-directed interventions

#### Accommodation

Key RTW Element Across a Range of Health Problems and Workplaces

- ▶ 30% reduction in LBP work disability
- Therapeutic, supportive, valued contribution
- Time limited, periodic review + adjustment, transition
- Outside expertise if needed but usually self-arranged!

Shaw and Pransky, 2005.

Liberty Mutual Insurance. "The Interactive Process. A Framework for Disability Accommodations." Insight to Action. 2015. Link to paper: https://business.libertymutualgroup.com/business-insurance/Documents/Coverages/Interactive%20Process%20%28LMB%29.pdf

#### **Finding Alternate Duty Options**

- What's not getting done?
- What parts of the job CAN the EE do?
- Pacing, rest, task-sharing options?
- Skill and knowledge-building opportunity?
- Role of technology in the future? (technicians working remotely...)

#### Key Features of Successful RTW Coordination

According to Expert Case Managers

- Education supervisor, worker
  - Provide necessary and timely information
- Empathy taking concerns seriously
- Communication keeping the messages about RTW positive
- Negotiation meet needs of all parties, manage conflict
- Support worker and supervisor AFTER RTW - non work issues (psychosocial)

Experts (including OHNs) did not endorse medical case management as an effective **primary** strategy for RTW - but more needed with HDHP?

Iles, Wyatt, Pransky, JOR, 2012

#### NH Older Workers and Work Injury Study

Detailed interviews of workers > age 55

3 distinct groups of older workers:



- 1. Healthy survivors still successfully working in first career for 40+ years
- 2. Employed post-retirement (second career)
- **3. "Trapped"** (finances, health insurance, poor health) want to retire but can't

#### Each group – unique DM challenges / opportunities

For more information see <u>https://www.businessinsurance.com/article/20120207/STORY/120209904?template=printart</u>

#### **Technology and Health Care**

- Telemedicine American Well, Teladoc, DoctorsOnDemand, etc.
  - 15M Americans had a virtual visit with a health care provider in 2016
- Remote monitoring, dx, evaluation, treatment
  - Remote HR arrhythmia detection disposable patches
  - PhysIQ / Phillips / Nokia / Kinsa, uBiome, CloudDX Evaluate spit, poop, urine, breath, vital signs
  - Mental health and PT Ginger.io Reflexion Health
- Key to manage WD in remote / distributed workforce? More acceptable to millennials?
- Greater access to practitioners with RTW expertise and interest?



#### E-intervention Improves Recovery and RTW After Gynecological Surgery

Problem: Prolonged OOW after routine gyn surgery (> 10w)

#### Program design:

- Needs, attitudes, beliefs: Patients / Employers / Providers
- Addresses delayed RTW as a system/social problem

#### E-health intervention

- **Patient:** personalized pre- and post-op; health coaching
- Physician, employer, family specific websites / coaching

#### Multicenter RCT results

- Patient (89%), provider (76%) and employer (61%) engaged
- 30% LESS sick leave days; Much less likely to have WD recurrence

#### Can we use low-cost tech to provide right info at the right time?

Vonk Noordegraaf A, Huirne JA, Brölmann HA, BJOG, 2014



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#### Misinformation in the Media

- 100 national press articles
- LBP usually depicted as chronic/catastrophic
- ► Experimental treatments
   → effective
- Case report > group experience
- Warnings about opiates
- Few emphasized a non-medical approach



Schoene, 2003



#### Getting People Back to Work Decreases WD AND Medical Costs (Sweden)

- 140 working LBP patients, high WD risk, randomized to
- ► Care as usual, or
- Problem-solving, self-management, communication training for patients AND their supervisors by case manager
- Results (6 mo f/u)
  72% LESS lost work days
  4X LESS likely to

#### seek more health care

Link to full article online: (Boersma, Linton et al JOR 2016).



Liberty Mutual Insurance. "Controlling Employer Medical Costs. Making a Case for an Early Return-to-Work Approach." Insight to Action. 2017. Link to paper: https://business.libertymutualgroup.com/business-insurance/Documents/Coverages/Controlling%20Employer%20Medical%20Costs-LMB.pdf

#### Summary

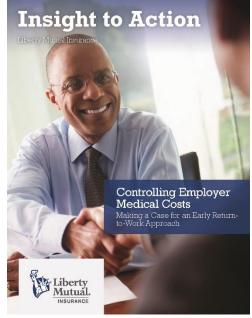
- Many changes in work and workforce most present new challenges to preventing work disability, and some opportunities
- Aging and more unhealthy workforce, more multimorbidity

   A significant factor for decades to come
- Basic principles for RTW success remain the same but require adaptation to the new reality of workers, work, and socioeconomic context

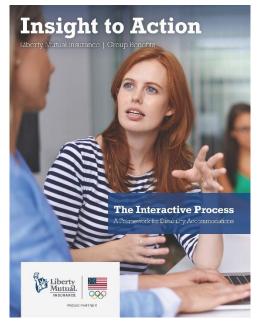


#### Thanks for your attention!

## For more information about Liberty Mutual Insurance's accommodation services, email <u>NAME@LibertyMutual.com</u>



Link to paper: <u>https://business.libertymutualgroup.com/business-</u> insurance/Documents/Coverages/Controlling%20Employer%20Medical %20Costs-LMB.pdf



Link to paper: https://business.libertymutualgroup.com/businessinsurance/Documents/Coverages/Interactive%20Process%20%28LMB% 29.pdf