

# The Final Years of Work: Fireworks or Flameout?

William G. Buchta, MD, MPH  
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# Disclosure

- No financial relationships to disclose other than to say that I work for Mayo Foundation, source of EmbodyHealth.
- However, I do have a confession...

Average age of NASA employee  
in 1969 when Armstrong stepped  
on to the lunar landscape?

27

Average age of NASA employee  
38 years later in 2007?

47

# John Glenn, 1962 and 1998



# Goals

- Describe factors for an aging workforce
- Develop strategies for older workers to
  - Maximize productivity
  - Minimize disability

# Goal #1: Factors for Aging Workforce

- Demographic
- Social
- Financial
- Legal
- Medical

# Demographic

- Baby boom: over 75 million in 18 years
- Workforce bulge from 1950 to 1995
  - Males 55 - 64: 85% 65%
  - Males 65+: 45% 20%
  - Females 55 - 64: 25% 45%
  - Females 65+: 10% 10%

U.S. Census Bureau

# Demographics

- 2010 - 2030
  - Population age 45-64 dwindles
  - Population age 65+ rises
- By 2025
  - Twice as many retirees
  - Only 15% more workers

# Social

- Retirement: a modern construct
  - “a dividing line between economic productivity and dependency.” Alan Walker, British economist
  - Win-win-win in the 50s and 60s
    - Government: jobs for returning soldiers
    - Business: opportunity for “fresh blood”
    - Unions/workers: chance to retire with little “buy-in”

College Health Tips • Lessons of the Six-Day War

**U.S. News** & WORLD REPORT  
JUNE 11, 2007

# 10 Bargain Retirement Spots

2007 ANNUAL GUIDE

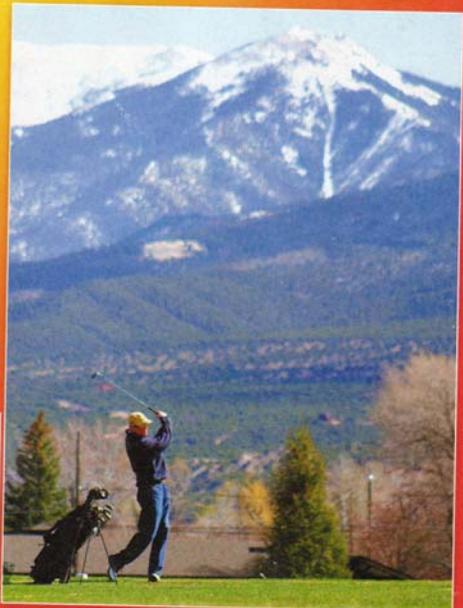
Great places to enjoy life without breaking the bank

- Planning a worry-free future
- Fitness for the 50-plus set
- Savings tips for 20-somethings

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# Social

- Turning of the tide
  - 1/3 of British workers afraid can't work past 60
  - Only 1/3 of British early retirements are voluntary.

[www.hazards.org/olderworkers/](http://www.hazards.org/olderworkers/), Oct-Dec 2006

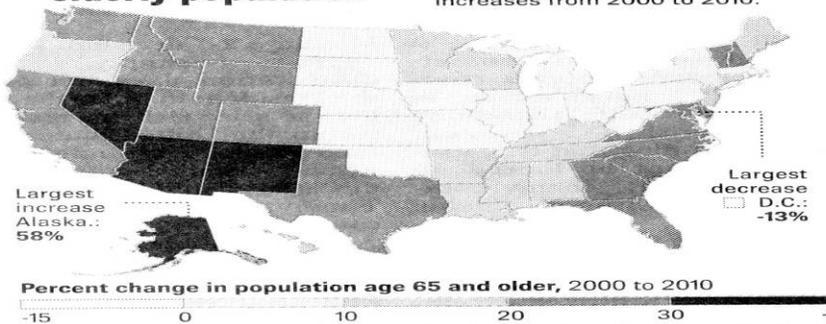
- W. Europe is tightening retirement criteria

# Financial

- Social Security near bankruptcy
  - Raising age of eligibility
- Pensions drying up
- Price inflation
- Negative savings rate

## Double-digit growth in elderly population

The U.S. elderly population in most states was projected to experience double-digit increases from 2000 to 2010.



SOURCE: Brookings Institution

AP

## Studies say boomers expect to work longer

WASHINGTON (AP) — As the baby boomers begin to ease into their 60s, most expect to delay retirement longer than their parents or grandparents.

That's good, because many can't afford to stop working anytime soon.

Two new reports portray aging boomers as better educated, with higher incomes and longer life expectancies than the generations that preceded them. They also have fewer children and are less likely to be married, leaving them with fewer options if they need help in their old age.

"That one child they had will be very valuable," said William Frey, a demographer at the Brookings Institution, a Washington think tank.

Frey is releasing a report today that says higher rates of divorce and separation could result in greater financial hardship for aging baby boomers. In 1980, about two-thirds of Americans age 55 to 64 lived in married-couple households. That percentage fell to less than 58 percent in 2005.

Americans had been retiring at ever-younger ages since the growth of private pensions and Social Security began more than 50 years ago. However, the retirement trend appears to be reversing.

In 1950, nearly half of men 65 and older were still in the

labor force, according to the Census Bureau. That percentage bottomed out in the 1980s at less than 16 percent. It has since edged up to about 19 percent, and experts believe it will increase even more as the oldest baby boomers reach 65.

Women work in much larger numbers earlier in life, but among those 65 and older, their participation in the labor force has remained steady at about 10 percent since 1950.

There are about 78 million baby boomers, those born from 1946 to 1964. The oldest will turn 62 next year.

Some will continue working by choice — a government survey shows that most U.S. workers nearing retirement age want to gradually reduce their workload rather than abruptly stop. Others will have to stay on the job as fewer companies offer health insurance to retirees and an alarming number of private pensions fail.

There are more than 37 million Americans 65 and older, a number that is expected to nearly double by 2030, according to the Census Bureau.

"I think there will be significant accommodations and incentives to get people to stay and work longer, and not lose that human capital," said Richard Suzman of the National Institute on Aging, a government research agency.

# Legal

- Age Discrimination in Employment Act
  - 1986 amendment: no forced retirement
- Americans with Disabilities Act (ADA)
  - Age not a factor in hiring
- Family Medical Leave Act (FMLA)
  - Can't lose job for illness absence
- Proposed FAA rule change for pilots
  - 60 to 65 for retirement

# Medical

- Life expectancy over age 75
- Medical insurance as motivator to work up to age 65
- Cost of medications over age 65

# Medical: 2-Edged Sword

- Living longer productive lives
- Accumulating medical problems along the way
  - DJD
  - COPD
  - CAD/ASCVD/PVD/CVA/TIA
  - Ca
  - Xhxfrreraeflaksfksfj (dementia)

# Medical: Illness/Injury Data

- 2005 BLS data, median lost days/illness:
  - All workers: 7
  - Age 45 – 54: 10
  - Age 55 – 64: 11
  - Age 65 plus: 12
  
- Farm, fish, forestry: 7
- Construction: 9
- Transportation/material moving: 9

# Medical: Injury data

- Illinois trauma registry, 1995 – 2005
  - Case fatality rate
    - Under age 55: 1.2 %
    - Age 55 & over: 2.37 %
  - Incidence rate ratios for major trauma compared to age 15 to 24
    - Age 25 to 64: 1.03 to 1.15
    - Over age 64: 1.5

# Natural Consequences of Aging

- Decreased muscle mass past age 27
- Decreased lung capacity
- Decreased height/bone density
- Waning senses
  - Hearing
  - Vision
  - Taste/smell
  - Equilibrium

# Consequences of Risky Behavior

- Tobacco use
- Obesity
  - Lower disability-free life expectancy
  - Increased work comp costs

*Arch Intern Med 2007;167:766-780*

- Sedentary Lifestyle
- Stress
  - Retired colonel syndrome
  - Lack of sleep and “margin”

# Counter-Arguments to Aging Perils

## #1

- Widening variance with age
  - Some can't work past age 55
  - Others still vital into 70s or 80s
    - John Glenn
    - My 79 year old pilot

# Counter-Arguments to Aging Perils #2

- While can't deny tendency toward decline in physical performance with aging,
  - Average decline only a few %age points,
  - BUT range of performance between workers is much larger.

Simon Pickvance, Sheffield U., *Hazards*

# Counter-Arguments to Aging Perils

## #3

- Myths about Aging
  - Inability to learn new skills
    - Just takes longer
  - Less productive
    - Typists
      - slower tapping rate & reaction time
      - More sensitive advance scanning
      - Thus, same time to accomplish task.

Salthouse TA, J Exp Psych, 1984

- Expertise and Experience

**CAUTION**

**THIS SIGN HAS  
SHARP EDGES**

**DO NOT TOUCH THE EDGES OF THIS SIGN**



**ALSO, THE BRIDGE IS OUT AHEAD**



# Advantages of Older Workers

- Decreased use of sick leave
  - Age 30 – 59: over 80% of employees
  - Age 60 – 69: 70%
  - Age 70 plus: 60%

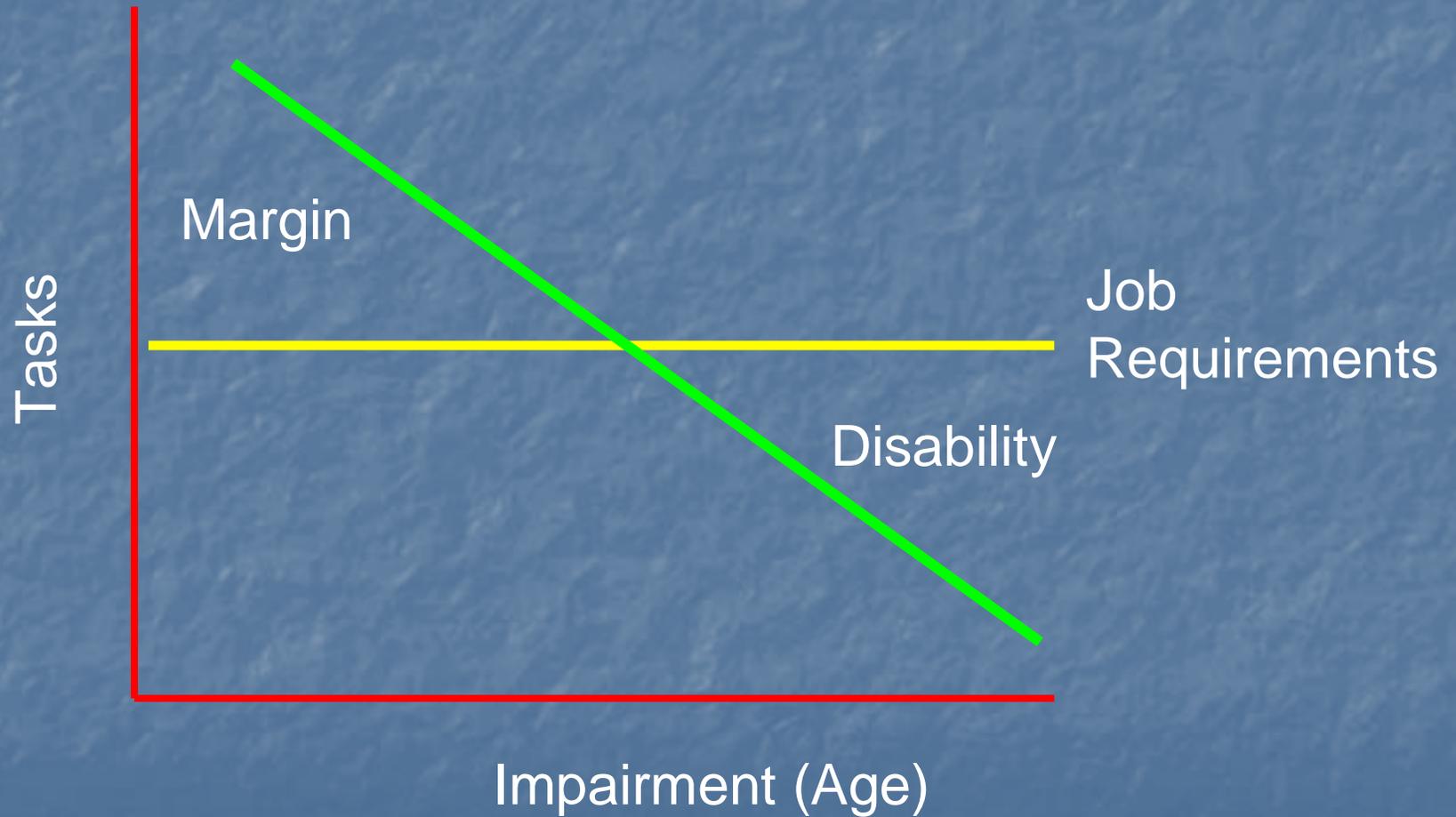
Roundtree P U. of Texas Houston, 2005

- Different values
- Loyalty

# Goal #2: Strategies for Maximizing Productivity, Minimizing Disability

- Awareness of ability/demand match
- “Age management”
- Health promotion
- Modeling other organizations

# Ability/Demand Match



# Age Management

- Job re-design
  - Starting at age 45
  - Transitions: tasks, shifts, full- vs. part-time
- Access to safety/vocational training
- Discourage piece-rate
- Focus on safety
- Case management for return to work
- Health promotion

UK solutions, *Hazards*, Oct/Dec 2006

# NASA HRA 2007 Participation

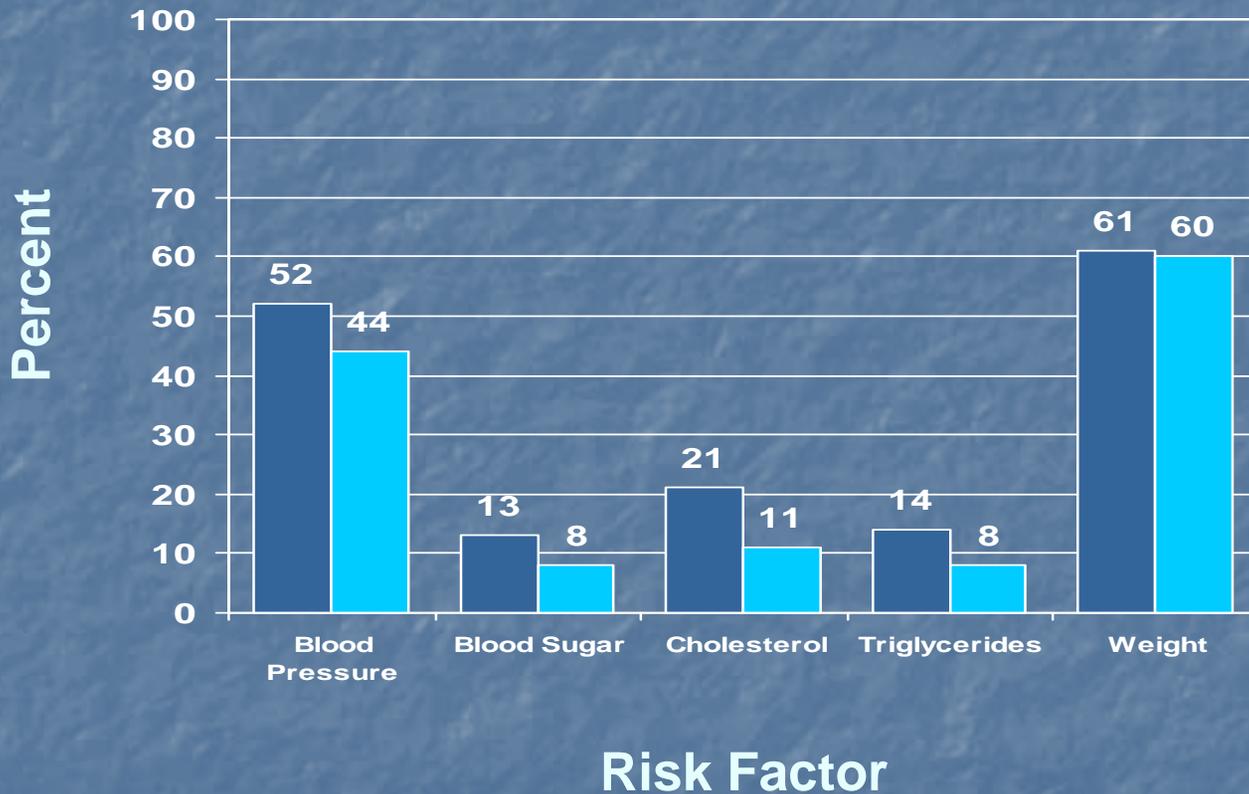
- Participation = 1,200 or 8% of eligible
- 67% of participants were in the 40-59 age range
- Males represented 52% of participants and females 48%
- Civil servant employees represented 94% of participants

# Risk Stratification

## Book-of-Business Comparison

<b>Risk Level in 2007</b>	<b>NASA</b>	<b>B of B</b>
Low (0 or 1 risk factor)	4%	5%
Moderate (2-4 risk factors)	50%	53%
High (5-7 risk factors)	42%	39%
Very High (8 or more risk factors)	4%	2%

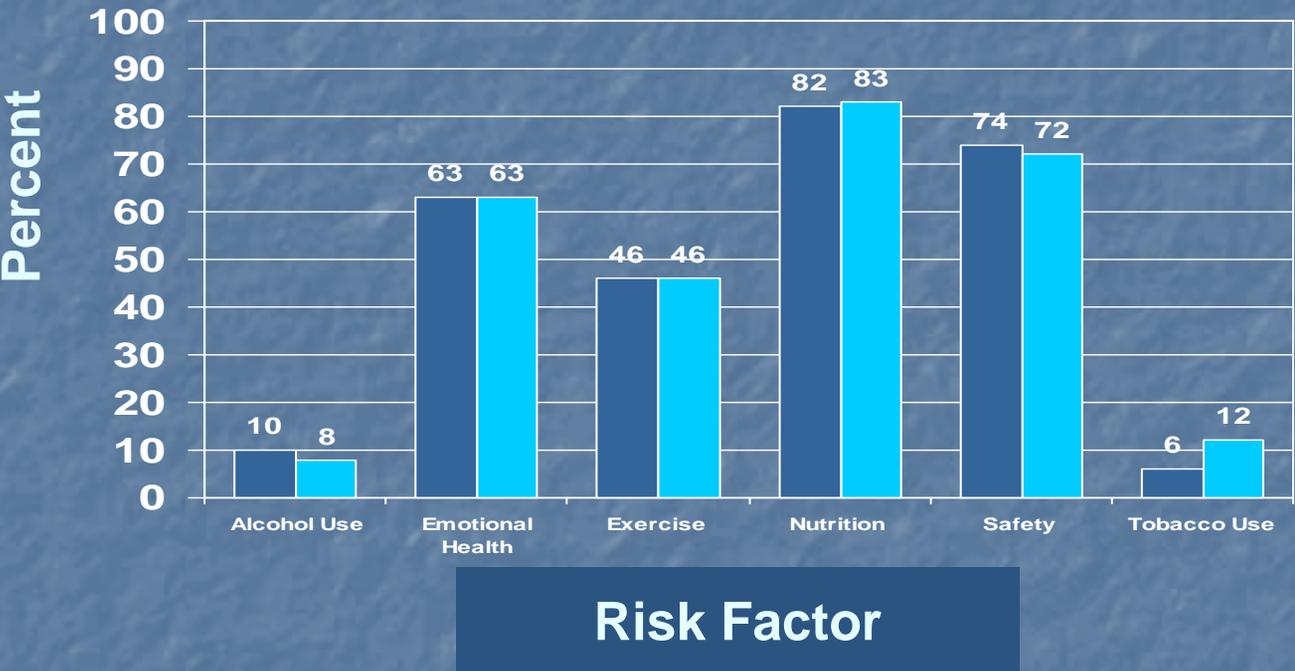
# Medical Risk Factors – Total Population



**NASA exceeded benchmark for all medical risk factors.**

■ NASA 01/29/2007 – 5/29/2007    ■ Mayo Clinic Book of Business

# Lifestyle Risk Factors – Total Population



**NASA consistent with benchmark, except lower prevalence for tobacco use.**

**NASA 01/29/2007 – 5/29/2007**      **Mayo Clinic Book of Business**

Have you ever utilized one of the onsite fitness facilities, either at your own Center or while on TDY (Temporary Duty)?

	<b>2007</b>	<b>%</b>
<b>Yes</b>	<b>831</b>	<b>69%</b>
<b>No</b>	<b>350</b>	<b>29%</b>
<b>N/A</b>	<b>22</b>	<b>2%</b>

# Key Metrics: Interactive Resources

<b>Program</b>	<b>Number of Enrollees - 2007</b>
Healthy Weight	143
Fitness for EveryBody	60
My Stress Solution	39
Health Monitor	35
Healthy Pregnancy	6
My Smoke-Free Future	4

**Note: 2,022 users have signed up for the online Mayo newsletter**

Have you ever utilized any of the services of a NASA Occupational Health Clinic such as flu vaccination, allergy shots, health maintenance exams, or consulting with a health care provider?

	<b>2007</b>	<b>%</b>
<b>Yes</b>	<b>1057</b>	<b>88%</b>
<b>No</b>	<b>121</b>	<b>10%</b>
<b>N/A</b>	<b>20</b>	<b>2%</b>

# “Age Management” in SE Minn Clinic/Medical Center

- Case Management/Return to Work
  - Job pool
  - Primary placement
- Job Fitness Eval/Occupational Review
  - Implies close/consistent supervision
  - Typical profile (100 consecutive cases, 1997)
    - 25% psychiatric
    - 25% chemical dependency
    - 25% medical (CV, neuro, endo, etc)
    - 25% no explanation

# Minnesota example (cont.)

- Late-age hires, salaried positions
- Non-surgical surgeons
- Vacation allotted by decile
- No call after age 60
- Retirement plan
  - 7-year vesting for defined benefit plan
  - Based on top 3 consecutive of last 10 years
- Supplemental work after retirement

# Success Story

- Char W., 56 year old RN off work for 2 years by June 2006
  - S/P lumbar fusion with malunion and infected hardware
  - Posterior leukoencephalopathy, seizures
  - Depression
  - Diabetes
  - Debility

# Success Story

- 32-year employee
  - CV staff nurse until ankle fx in 1997
  - New job as D/C planner until 2004
- Weaned off walker and seizure Rx
- RTW with restrictions Jan 2007
- Placed in Nicotine Quitline
- Full time, quitting smoking herself

# Summary

- Return the older employee to work as soon as possible
- Retain people in the workforce as long as possible
- Allow workers to retire with fireworks rather than a flame-out
- Avoid wasting our most valuable resource: the human resource