Willis Towers Watson

How an aging workforce and population

will impact health care in the U.S.

A. Introduction

An aging population has been a decades-long trend here in the United States as well as throughout much of the developed world. With large numbers of the Baby Boomer generation entering retirement, their impact on the medical system as they require increased health care is already significant and will become more so during the years to come. Therefore, the medical system will need to adjust to this new reality and increase its health care capacity as the large Boomer generation enters their 60s, 70s, 80s and onward. At the same time, with continued innovation in the medical field, longevity is likely to steadily increase. Therefore, demand on overall health care provision will rise still further.

This paper quantifies the previous and expected population demographic changes, reviews the characteristics of the health care workforce, points out that their average age will increase along with the general population, and describes the advantages and disadvantages of an older workforce. After that, incentives to retain older health care employees are discussed along with safety and risk control initiatives aimed at reducing the injury potential to these workers. Finally, we address the role of Willis Towers Watson in assisting health care clients in preparing for these new realities.

B. The U.S. population is growing older

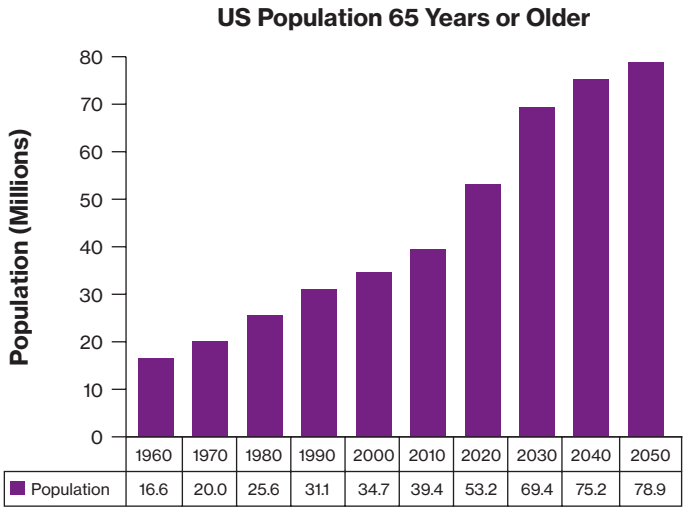
The workforce of the twenty-first century is aging, with increasingly larger proportions of the workforce 55 years of age and older. This development is the result of a convergence of demographic and societal trends. In the U.S., the population aged 65 and older is expected to more than double between 2012 and 2060, representing about one in five residents as compared with one in seven today.

One notable trend is the dramatic increase in longevity. In just over a century, life expectancy in the U.S. increased from 48.3 years for males and 51.1 years for females in 1900 to 75.3 and 81.1 years, respectively, in 2008. A second trend is the decline in fertility rates, which has resulted in fewer young workers entering the workforce. The third demographic trend contributing to the aging of the workforce is the impact of the Baby Boom generation. Baby Boomers, born between 1946 and 1964, began turning 65 in 2011. In actual numbers, about 10,000 Baby Boomers in the U.S. will turn 65 every day until about the year 2030, according to the U.S. Census Bureau.

The Baby Boom generation has impacted societal trends all the while. As this group has aged, the national workforce has been significantly affected. Many older workers are now staying in the workforce longer than they originally anticipated because of personal preference or out of necessity. This has led to an older workforce having increased chronic medical conditions.

Refer to Figure 1 below for the significant and steady growth of the number of "retirement age" Americans since 1960 and projected to 2050.[1]

Figure 1



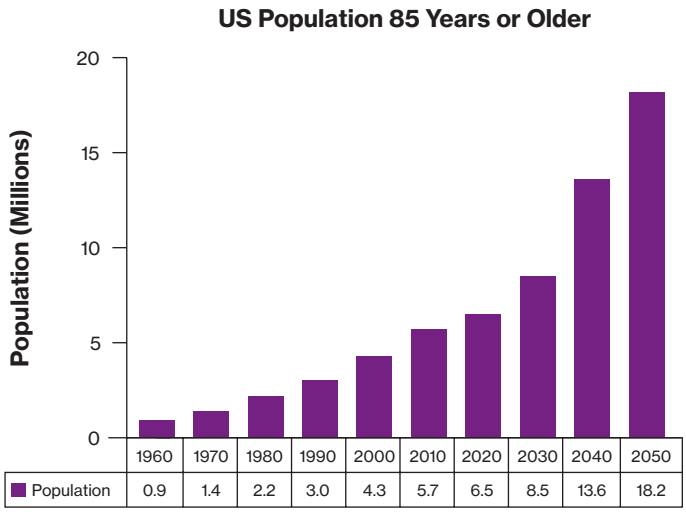
Source: U.S. Census – Aging in the United States – Past, Present, and Future

Another way to interpret the data shown in the above graph is that the 65-and-older age group is estimated to double in the U.S. from 2010 to 2050.

In addition, the population of the "oldest old" (those 85 and older) will grow even more dramatically due to better nutrition and medical care. The population of this group is expected to grow by 219% between 2010 and 2050. This 2050 estimate is therefore more than triple the 2010 figure. And these people use significantly more health care services than younger people.

Refer to Figure 2 for more data here.[2]

Figure 2

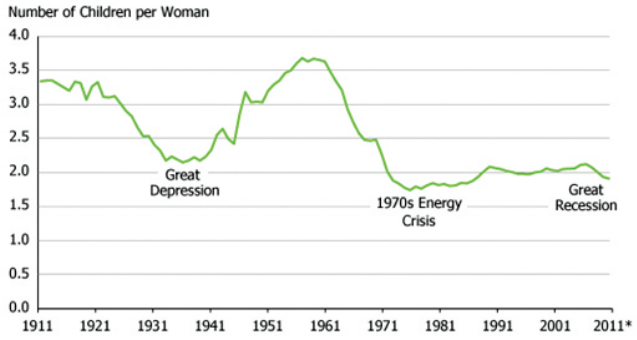


Source: U.S. Census – Aging in the United States – Past, Present, and Future

Americans are living longer but it is also true that they are reproducing more slowly. This has contributed to an increasing elderly population. It is a demographics trend that may continue for the foreseeable future. Figure 3 below graphs the average number of children born to women in the U.S. over the past century.[3] The bulge in the center of the chart represents the Baby Boom spike in births from 1946 through 1964. The birth rate peaked in the late 1950s at over 3.5 per woman. Since the early 1970s, however, the rate has leveled off to the 2.0 range, which is considered to be the population replacement rate.

Figure 3

U.S. fertility rates — 1911-2011

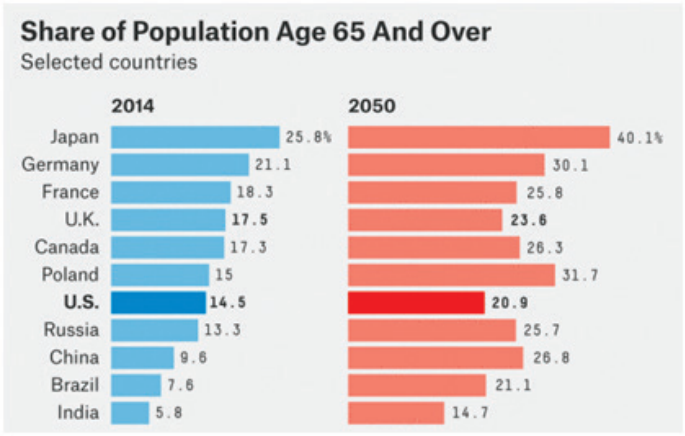


***Estimated by PRB (Population Reference Bureau)**

Source: National Center for Health Statistics

This overall population aging trend is not limited to the U.S.; it is globally pervasive. Figure 4 illustrates how the developed world is also aging rapidly — at a higher rate than in the U.S., in fact.[4]

Figure 4



Source: U.S. Census Bureau International Database

The steady increase in longevity has normally been considered a positive phenomenon. With advancement of medical technology and betterment of health care services, life spans have been extended globally, but this trend has also presented some challenges going forward. As our population continues to age, productivity and growth rates could suffer. In direct connection with this, the level of health care services required can be expected to increase significantly. In the following section, we explore how the health care system and its employees will be impacted.

C. More health care workers will be needed

The expected growth of the older adult population in the U.S. over the next 50 years as discussed in the previous section will have an unprecedented impact on the U.S. health care system, especially in relation to supply of and demand for health care workers. By 2030, the share of the population aged 65 and older will increase dramatically from 13% to 19% according to the U.S. Census Bureau 2010. The supply of health care workers may decrease as they age and large numbers retire and/or reduce their working hours. Older adults also consume a disproportionately large share of American health care services, so demand for these services will grow. The aging of the population will also affect the nature of the skills and services the health care workforce must be equipped to provide and the settings in which it is provided.

A 2006 report issued by the New York Center for Health Workforce Studies at the SUNY School of Public Health[5] assessed the implications of the aging of the population on the supply and demand

for a variety of health professionals needed to serve older adults. Key findings include:

- Older adults will increasingly be racially and ethnically diverse, and inclusive of more Asians and Hispanics.
- Older adults will be better educated, have greater access to information, and have more socioeconomic resources. These demographics may lead to changing patterns of use and different demands for health services from those seen in past generations.
- Adults 65 and older use more and different health services than younger people.
- The projected demand for health services from older adults is most likely an underestimate of their true need for services, which is influenced by their ability to find or pay for health care services.

Findings related to the health workforce are:

- Most health care professionals receive limited training on caring for older adults.
- Average age of health professionals is increasing.
- Future shortages of health workers to serve older adults are likely.
- Future demand for health care professionals and paraprofessionals to serve older adults will be affected by health insurance reimbursement policies, emerging technologies, new models of care, and changes in profession-specific scope of practice.

With reference to the actual shortage of health care workers, a March 2013 publication by the National Technical Assistance and Research Center estimated that by 2030 the total number of health care employees will need to increase by over 3.5 million workers just to maintain the present employee-to-patient ratios that exist today.[6]

To give us an idea of overall scope, according to the United States Bureau of Labor Statistics, the "health care and social assistance" sector employs about 14% of the working population in this country and is expected to continue to expand. As an example of this growth, employment in this sector increased by 24.4% between 2000 and 2008. The unemployment rate was also significantly lower than in other sectors (3.2% in 2008 as opposed to 5.8% generally). So the lack of a pool of unemployed health care employees puts increased pressure on achieving further growth in their overall numbers.

Primary care physicians

Most primary care physicians are drawn from the subspecialties of internal medicine and general/family practice medicine. Although physicians in most specialties see some older patients, primary care physicians are more likely to see larger numbers of older adults. Several trends among medical students and primary care physicians raise concerns about the care of older Americans. First, medical student interest in primary care is declining; in part because primary care physicians are paid less than other specialties. Second, the number of primary care physicians receiving certification in geriatrics as a subspecialty has declined. Third, doctors are aging and older physicians tend to work fewer hours.

It may be necessary, therefore, to use other health workers to perform some of the routine care provided by primary care physicians, as the benefits of having a physician provide some primary care services might be exceeded by its cost in future years. Nurse practitioners, for example, may be able to perform many of the primary care services of physicians. In addition to lowering costs and thus increasing net benefits, delegating routine physician responsibilities to other health workers allows physicians to give more attention to the services where their training provides greater net benefit.

New models of care will need to evolve to serve a growing population of older adults. This may include more services being provided at the homes of patients, in group settings, in nursing homes, assisted living facilities, and through the internet. Home health and assisted living settings are expected to employ many more health professionals in the next 10 years.

Nursing shortage

It is estimated that a nursing shortage of up to one million may develop in the U.S. by 2025,[7] an amount far greater than over the past 50 years — to the point where health outcomes could be adversely affected. One 2010 study concluded that reducing the number of patients under a nurse's care would significantly improve hospital care. The study found that if New Jersey and Pennsylvania hospitals had maintained a patient-to-nurse ratio at levels already mandated in California (a 5 to 1 ratio for medical-surgical units, for example), surgical deaths in these states would have been 11 to 14% lower in 2006.[8] Nursing schools, however, currently lack the ability to increase the supply of nurses. According to the National League for Nursing, over 99,000 qualified applicants were denied admission into nursing education programs in 2008. This bottleneck may be the result of yet another shortage: the low supply of faculty available for such programs. Over the last 50 years, shifting the education of nurses from within hospital-sponsored programs to academic institutions has increased demand for faculty with advanced degrees. The demand for practicing nurses with advanced degrees has grown as responsibilities for more health services are being transferred from physicians to nurses. Increased demand without a comparable increase in supply has driven up wages for practicing nurses, making it difficult for lower pay academic programs to attract much-needed faculty.[9] Any solutions will likely need to encourage U.S. citizens to enter the nursing labor market. Relying on foreign-educated workers to fill the nursing shortfall will not adequately increase supply and may harm global health efforts.

Direct-care workforce

Direct-care workers provide most of the paid hands-on care for older adults in the U.S. Direct-care workers include nurse aides and nursing assistants, home health aides, and personal and home care aides. Most of these workers care for patients at home or in nursing homes, with the remainder employed in hospitals. According to an Institute of Medicine (IOM) report in 2008, "Retooling for an Aging America," the demand for direct-care workers will increase with population aging, but their wages tend to be low and turnover high; up to 80-90% over their first two years.[10] The shift toward more home and community-based care is also likely to exacerbate unmet demand for direct-care workers, especially for personal and home care aides. Caring for older adults at home or in the community may require higher direct-care staff levels because the staff-to-patient ratio is necessarily higher in these settings. Direct-care jobs tend to be stressful, pay very low salaries, and have few benefits. Job-related injuries, many from overexertion while caring for a patient, also occur at higher rates. For these reasons, the turnover rates in direct-care positions are high. If these issues are not addressed, the supply of direct-care workers is not likely to expand sufficiently to care for the growing elderly population.

Factors with the elderly affecting medical service needs

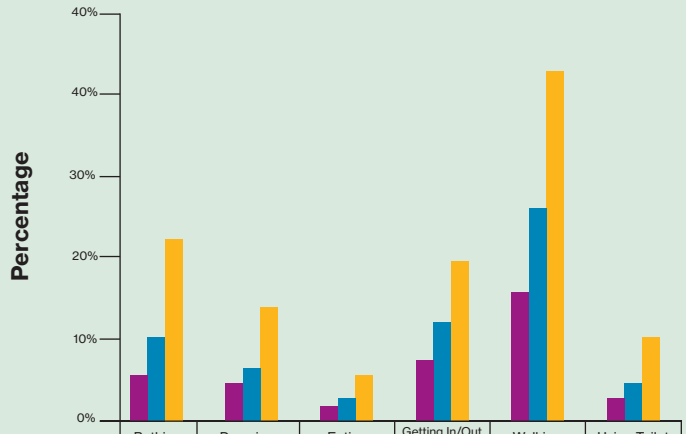
Individuals 65 years or older have different health care needs than younger age groups, affecting the demands placed on the health care system in the future. These factors include:

- Older adults are more likely to suffer from chronic illnesses (e.g., cancer, heart disease, diabetes). One in five Americans has a chronic condition. This increases to 84% for people 65 years of age or older.[11]
- Older adults are more vulnerable to broken bones in falls, and they are more likely to contract pneumonia as a consequence of influenza, etc.
- Older adults have more limitations in performing activities of daily living than younger people due to greater rates of physical and cognitive disability.
- Older adults consume far more prescription medications than younger people.
- Older adults consume more ambulatory care, hospital services, nursing home services and home health care services than younger people.

Figure 5 below provides data on specific physical limitations suffered by people over 65 and how the percentages affected increase significantly between 65 and 85.[12]

Figure 5

Elderly People with Limitation in Activities by Age Group – 2010



	Bathing	Dressing	Eating	Getting In/Out Chairs/Beds	Walking	Using Toilet
Age 65–74	6%	5%	2%	8%	17%	3%
Age 75–84	11%	7%	3%	13%	28%	5%
Age 85+	24%	15%	6%	21%	46%	11%

Source: A Profile of Older Americans: 2012 — U.S. Department of Health and Human Services

The needs and usage patterns of Baby Boomer older adults may be different from those of the previous generation; this will also affect the demands placed on the health care system in the future. Baby Boomer older adults will have a smaller pool of potential family caregivers than elderly individuals in the past. They have had fewer children than their parents and are more likely to have had no children. They are also more likely to be divorced and will thus be more likely to live alone as they enter old age when compared to previous generations.

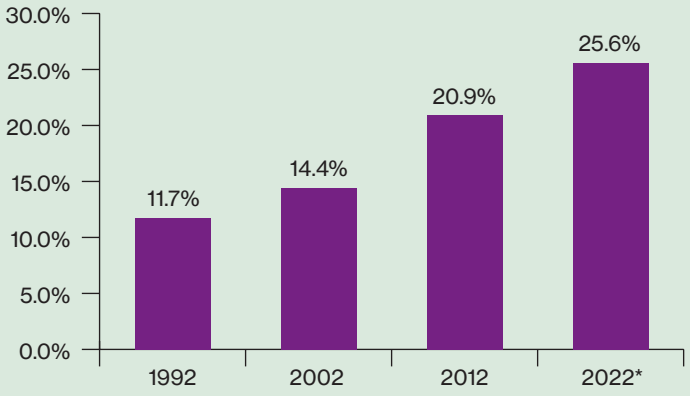
It is clear that all these factors indicate that new demands will be placed on the health care system. Not only will there be a need for greater numbers of health care workers, but the ways in which health care services are currently provided to the 65-year-old and older group will change.

D. The increasing age of health care employees

With the general aging of the population, the age profile of the overall U.S. employee workforce has been increasing, as well. Figure 6 illustrates this as the percentage of those workers at age 55 or older is expected to more than double from 1992 through 2022.[13]

Figure 6

Percentage of U.S. Workforce Aged 55 and Over



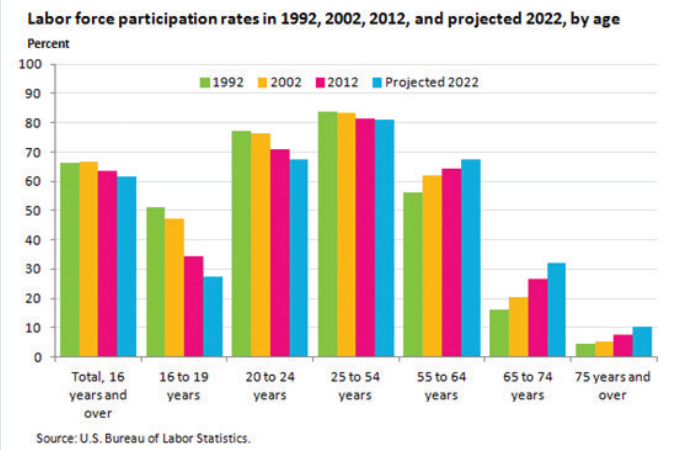
***BLS Estimate**

Source: U.S. Dept. of Labor, Bureau of Labor Statistics

This trend will only continue in the coming decades. According to a prediction by the U.S. Census Bureau, in 2050, 19.6 million American workers will be 65 or older, roughly 19% of the total U.S. workforce.

The Bureau of Labor Statistics also calculates (and estimates for the future) the percentages within the various age brackets that are working or will be in the future. By 2022, the agency estimates that 31.9% of those aged 65 to 74 will still be working. That compares with 16.3% of the same age bracket in the workforce in 1992, 20.4% in 2002, and 26.8% in 2012. The percentage of the 55 to 64 group has also been increasing and will continue to do so, albeit more slowly than those in the aforementioned 65 to 74 bracket. On the other hand, the labor force participation rate for people aged 16 to 54 years is estimated to fall by 2022. Data for the various age groups for the 10-year intervals from 1992 through the 2022 are plotted in Figure 7 below.[14]

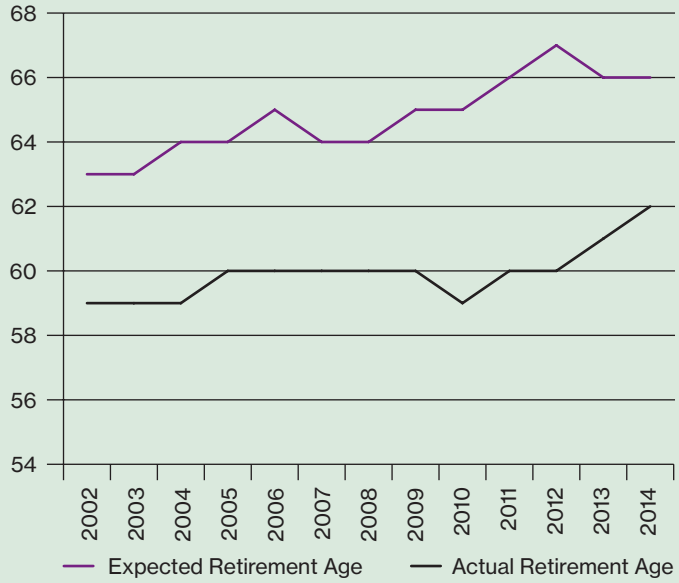
Figure 7



As further confirmation of this general aging workforce trend, the retirement age of the U.S. population is on the rise, as indicated from Gallup data shown below in Figure 8.[15] More and more of the elderly population are opting to stay in the workforce longer due to economic reasons, including to provide for longer life spans. As of 2014, the average actual retirement age was at 62.

Figure 8

Expected vs. Actual Retirement Ages – 2002–2014



Source: Gallup 2014

Economic forces affect the retirement choices for individual workers; and the 2008-09 recession and the sluggish U.S. economy since then have tended to delay retirement for many. The overall reduction in real estate values has exposed the reality of many older employees as having inadequate retirement savings. For example, the 2013 Retirement Confidence Survey sponsored by the Employee Benefit Research Institute found only 24% of workers at least 55 years old have set aside more than $250,000 for retirement (excluding the value of their primary residence and any traditional pensions). Moreover, 36% of this age 55 and over group has saved less than $10,000.[16] So rather than face a significant life style reduction in retirement, many people are electing to work a few years longer.

The aging American workplace will likely emerge as an increasingly visible issue in future years. Many employers understand that older employees often possess valuable accumulated skills and wisdom. But they must also manage the higher costs that many older employees incur from higher pay levels to more severe workplace injuries.

For those in the health care industry, these trends present even greater challenges as the health care workforce is already older than that found in other employment sectors. Some statistics illustrating this aging factor are:[17]

- Over 25% of all U.S. physicians are at least 60 years of age.
- The average age of a registered nurse is 50.
- By 2020, nearly half of all nurses will be at the traditional retirement age.

In contrast, the average age of occupational and physical therapists is about 40 years.

Occupations with long educational trajectories tend to have older workers on average than those with shorter educational trajectories. So physicians with their lengthy training are among the oldest health professionals as indicated above. Clinical psychologists, who must have a doctorate, are also substantially older than average.

Some health professions are more attractive to young people than others; these professions will be better able to withstand large numbers of retirements as the retirees will be quickly replaced. Geriatric sub-specialties in medicine, however, are not as popular among new medical school graduates. These specialties are not reimbursed as well when compared to others. Many younger nurses avoid long-term care settings such as nursing homes in favor of hospitals because the latter pays better.

Therefore, with a workforce already older than that found in many other industry sectors, some health care employers must maintain an adequate supply of skilled workers at all levels while meeting an increased demand for high-quality health care services. With the health care sector being especially vulnerable to the effects of an aging workforce, health care employers will need to rethink their employment policies and practices to simultaneously retain talented older staff and create job opportunities for new trainees of all ages.

E. An aging workforce — pros and cons

The health, safety and well-being of workers are influenced by the aging process, which creates both advantages and disadvantages for older workers and their employers. Some employers report that older workers often possess a stronger work ethic than their younger colleagues. Advancing age may also be associated with greater levels of experience, autonomy and efficiency. Generally, older workers report lower levels of work-related stress and less conflict with their coworkers. They may also experience more flexibility in balancing work and non-work demands than younger workers. In addition, older workers may have less interest in career advancement as they come closer to retirement. Many are "empty nesters" with minimal responsibilities of raising children. Interestingly, older workers tend to experience lower rates of work-related injuries and illnesses than younger workers. This advantage is likely the

result of greater adaptability with age, the compensating benefits of experience and knowledge, but also employment in generally less hazardous settings.

Turnover tends to be lower among the older employee group and recent Bureau of Labor data show that younger workers are more likely than older workers to be short-tenured employees. For example, in January 2014, 26.6% of 25 to 34 year-olds had tenure of 12 months or less with their current employer, compared with 8.9% of workers aged 55 to 64.[18] This reduced turnover among the older workers is an advantage with the high cost to employers of employee turnover and replacement.

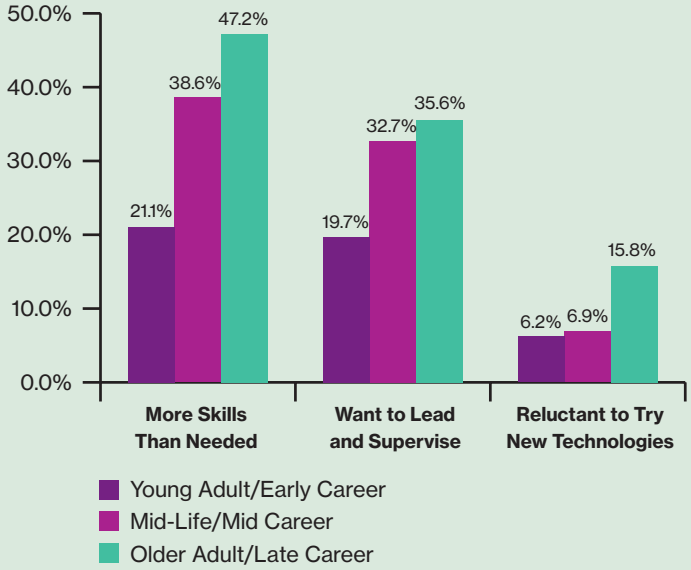
Older workers may also face a number of job-associated challenges, including diminished physical capacity however, slowing cognition and decreased working memory, more difficulty with hearing and vision, and higher rates of musculoskeletal conditions. It is important to note that many occupations do not require individuals to perform at full physical capacity. Therefore, some physical limitations will not necessarily affect the level of work performance to any significant degree. Nevertheless, older workers tend to fare more poorly with certain organizational demands of work, such as long hours and shiftwork. They may also find greater difficulty with reemployment after an involuntary job loss.

Although older workers often have a lower overall rate of job-related injuries, they tend to experience higher levels of injury severity and a higher rate of fatal injuries on the job. Older workers also have slower recovery after a nonfatal job-related injury or illness and, therefore, have longer delays in returning to work. For example, the average length of time away from work for a workplace injury or illness was eight days for all workers. This average was 11 days for workers aged 55 to 64 years and 18 days for those 65 and older. The most prevalent types of chronic diseases experienced by employees 55 and older are arthritis (47%) and hypertension (44%). Heart conditions, diabetes, psychiatric or emotional problems, and cancer are reported at 10%.[19]

Regarding overall employee value, many employers feel that employees of different ages may bring different attributes to the workplace. As noted in the employer perception survey results indicated in Figure 9, the employers polled were more likely to report that older employees/late career employees have higher levels of skills than needed for their jobs and that they are more likely to want to lead or supervise others when compared to younger employees.[20] Conversely, employers are also more likely to report that older workers are more reluctant to try new technologies than their younger counterparts.

Figure 9

Employers' Perspectives of Selected Attributes of Employees
(% of Respondent Organizations Stating "Very True")



Source: Pitt-Catsouphes, Smyer, Matz-Costa, & Kane, 2007

Various surveys of HR managers have identified advantages of older workers, including:

- An ability to cope with life's pressures and problems
- Wisdom and judgment in decision-making processes
- Invaluable work experience including diverse approaches
- Ability to apply life skills to problem solving
- Knowledge of specialist and technical functions
- Verifiable employment history
- Developed communication skills and tact
- Greater willingness to share experiences
- Strong organizational skills
- Value placed on teamwork
- More patient than younger employees
- Loyalty and confidence
- High level of motivation and interest in their work
- Willing to train and mentor younger employees
- Less competitiveness
- Fewer external responsibilities and distractions
- Preference for part-time or seasonal providing flexibility to employers

HR management also sees disadvantages in having an older workforce; these include:

- Higher pay due to experience/tenure
- Reluctance to accept peer reviews of own work
- Resistance to and fear of change
- Preference for flexible hours which some businesses cannot provide
- Difficulty mastering new technological challenges
- Lack of formal qualifications
- Need for additional training
- Less commitment as they closely approach retirement
- Performance issues when faced with age-related impairment
- Susceptibility to longer-term disabilities
- Chronic diseases leading to increased medical care and insurance costs

In summary, aging confers both benefits and risks on the health and well-being of workers. Therefore, an individualized approach to addressing the needs of workers in the context of their own unique abilities and limitations is necessary. At the same time, the risks associated with aging, such as slower recovery after illness or injury and a higher rate of fatal injuries, suggest that an injury and illness prevention effort focusing on both safety and health/wellness promotion is a key aspect of addressing an aging workforce.

F. Incentives in reducing medical worker turnover

Given the factors previously explored — an aging general population, the future need for more health care employees, the inherent higher-than-average age among health care workers, and the many advantages that older employees offer — it becomes essential that health care employers endeavor to retain and also recruit a greater number of older workers than in the past. Employers will have less access to a steady supply of younger workers and will need to rely on older workers to meet the expected medical needs. Therefore, they will be increasingly challenged to maximize contributions from various generations — but increasingly from the older ones. This is particularly true in rural areas where the shortage of medical personnel is acute.

Another factor in the desirability of reducing employee turnover is the high cost of replacing health care employees. A June 2006 publication from the Robert Wood Johnson Foundation quotes a survey of turnover in acute care facilities in 2000, which calculated the replacement costs for nurse positions as being two or more times a regular nurse's salary. In that year the national average salary for a medical-surgical nurse was $46,832. The cost of replacing one nurse, therefore, was $92,442. Replacing a specialty area nurse increased this cost to $145,000.[21]

Flexible scheduling policies could help reduce the incentive for nurses to retire. Although 12-hour shifts are fairly standard at health care institutions, many older nurses find that they are very tired after working that many hours. With the length of time to fill a nursing position often being 12 weeks or longer, proactively exploring part-time or flexible day opportunities with these nurses could pay valuable dividends in the end.

Health care employers can employ a range of strategies to help their older workers stay on the job. In designing these initiatives, employers should study the demographics, skills and knowledge transfer issues in their current workforces and how retirements will specifically affect their organizations. These strategies to retain older workers can encompass a number of specific areas, however, including ergonomics, health promotion, education and career enhancement, along with HR policies and procedures. Here are a number of options, many of which are not expensive:

- Flexible shifts (e.g., option of 4, 6 and 8 hours)
- Job sharing
- Weekend-only work
- Seasonal work allowing employees to take extended leave during slow periods
- Benefits offered for employees with reduced schedules
- Flexible/phased retirement options
- Restore benefits for older workers returning to the organization within five years
- Financial/retirement planning assistance
- Maximizing work-at-home opportunities
- Reduced floating and overtime for tenured employees
- Patient assignments in clusters to avoid extensive walking
- Improved design of patient units with an emphasis on flooring, lighting and placement of nurse stations
- Ergonomics committees and training
- Back care/safety training/avoiding lifts below knees and above shoulders
- Exercise programs
- Mechanical devices to assist with patient lifting, such as over-the-bed lift devices
- Patient stretcher beds that convert to chairs
- Patient transfer and mobility equipment
- Lift and transport teams
- Use of older workers to mentor newer employees and intergenerational workshops and committees

- Implementation of wellness programs (e.g., exercise, strength training, nutrition)
- On-site or subsidized health club membership
- Stress-reduction training

There have been a number of health care service and research organizations engaged in studying this turnover issue and in various staff retention initiatives in recent years. Many of the turnover reduction strategies listed above have been suggested. For example, the 2006 Robert Wood Johnson Foundation publication referenced earlier includes results of a telephone survey of 13 individuals with reputations in health care system design, executive leadership and management, patient-centered care and safety, and labor relations. They suggested that the following creative and innovative roles be created in employing older nurses for the benefit of the organization: chief on-boarding officer, best-practice coach, technology facilitator, team builder, senior consultant/cost-benefit analyst, preceptor/mentor, community liaison, research assistant, relief nurse, safety officer, staff development, communicator, patient educator and family advocate, quality coach.[22] The advantages of such roles lie in the increase of administrative efficiencies and effectiveness of younger and newer nurses through mentoring by experienced personnel, while reducing the day-to-day physical workload borne by the older employees.

A 2010 Sloan Center on Aging & Work report noted that employers in the health care sector appear to be aggressively advancing flexible work arrangements,[23] allowing employees to work more customized schedules as opposed to the more traditional fixed shifts.

At Robert Wood Johnson University Hospital in New Brunswick, NJ, a survey of recently retired nurses was conducted in an effort to understand the reasons why they were retiring earlier than other employees. The goal of the assessment was to identify ways to improve the workplace to keep the experienced nurses working longer and reduce employee turnover. As a result of this survey and workplace assessment some of the changes implemented were ergonomic, including such improvements as repositioning floor refrigerators housing patient medications to countertops to reduce the frequency of bending down to retrieve patient medications and purchasing anti-fatigue mats to reduce overall musculoskeletal stress.[24]

Hunterdon Healthcare System in New Jersey has employed technology to improve workflow, relieve the physically demanding nature of bedside nursing and address the challenges associated with an aging workforce.[25] Some examples:

- Improving on-screen prompting of electronic medical records to assist people with memory loss
- Installing smart beds throughout the hospital that collect and provide data automatically, assist in turning patients, and are directly integrated to a nurse call system
- Reorganizing information on electronic medical records to highlight and group relevant tasks
- Providing ergonomically designed computer components
- Simplifying data flow on computer screens to simplify data entry

The prospect of health care employees being increasingly challenged by age-related disabilities and chronic health conditions, along with the likelihood of losing some experienced older health care workers to retirement, present health care employers with a powerful incentive to examine their employment policies and practices. Hospitals and other health care employers risk a significant loss of workplace knowledge and productivity if they do not find ways to retain and accommodate their older workers.

G. Reducing injury potential to older health care workers

As American workers hold off retirement and stay employed longer, their need to remain physically capable takes on even greater importance. Older workers usually have fewer injuries but when one does occur, it tends to be more severe and involve a longer recovery. Therefore, implementing effective policies and procedures addressing employee health and safety will reduce injuries, illness and absenteeism thereby improving overall efficiency. This concept is especially important with regard to older workers.

Although their ability to perform the most physically demanding work does diminish with age, older workers do bring non-physical advantages to the worksite, among these being experience, knowledge and dedication. Transferring older workers to roles that allow them to mentor and train younger employees is an excellent method of tapping these qualities. A number of possible position types along these lines were cited in the previous section. In the end, strategies of this type allow the employer to retain the experience and knowledge base of older workers while reducing the potential of their suffering injuries and illnesses.

Challenges

As the strength and stamina of most people decrease on a relative basis as they age, older workers need to work closer to their ultimate capacity than their younger counterparts do. They may avoid some incidents through experience and care, but this capacity issue does explain their higher injury severity rate. Some common examples of reduced physical abilities due to aging are:

- Loss of muscular strength and flexibility
- Diminished range of motion
- Reduced grip strength

- Decreased postural steadiness
- Decreased oxygen intake
- Reduced blood flow and tactile feedback
- Reduced nervous system response
- Diminished visual and audio ability
- Slower mental processing

With these factors being in the mix, the potential for slips, trips and falls presents a significant injury exposure, and bone fracture, especially to those individuals over the age of 65, becomes a larger issue.

Degradation in physical strength and abilities also translates into a greater chance of ergonomic-related claims. Figure 10 illustrates the factors which typically come into play with the development of musculoskeletal disorders (MSDs) over time.

Figure 10

Ergonomics and the Aging Workforce

Solutions: Administrative Controls

Best practices for maintaining older employees' health, safety and productivity begin with administrative controls. These are policies and procedures that limit the exposure to workplace hazards. General examples are:

- Training
- Job rotation
- Return-to-work procedures
- Wellness programs

Training is a key administrative control across the board when it comes to employee health and safety, from new employee orientation and periodic safety awareness training to job transfer training, and when addressing key exposures and emerging risk trends. Employees, especially older individuals, need to be educated relative to their physical capabilities and limitations. With the aging population trend in general, geriatric care and training health care employees in basic competencies in caring for older adults will become increasingly important.

Job rotation is a useful tool in reducing the potential for worker injury in those jobs requiring the greatest physical demands. It is a system of having employees cross-trained and proficient in two or more job types. They are then rotated, for example, every four to six hours from jobs with higher demands and injury exposure to those with less. The benefit of such a procedure is to reduce the long-term physical stresses (e.g., heavy lifting, repetitive motion, etc.) on individual workers to the point where ergonomic-related injuries or illnesses are less likely.

Return-to-work procedures entail a formalized commitment to having employees who have missed work due to injury come back in some capacity as soon as they are physically able to do so. It involves inventorying those modified duty job tasks that employees with temporary disabilities can perform while they are recuperating but before they are able to return to their normal positions. Employers work with medical providers, insurer claim representatives and the employees themselves in administering this program. Many employers have benefited from implementing return-to-work procedures (with workers ultimately getting back to their regular jobs more quickly than they would have otherwise) along with savings on insurance indemnity claim costs.

Wellness programs are company-sponsored health activities. They typically include health education training, exercise procedures, weight-loss and nutrition counseling, tobacco-cessation programs, and health screenings that are designed to help employees eat better, lose weight and generally improve their overall physical health. Better employee health directly translates into fewer workplace injuries, delayed retirement and lower turnover.

Health care employers can benefit by integrating their health and safety management. By better coordinating these functions among workplace activities, employers can substantially enhance the overall health and well-being of the workforce while better preventing work-related injuries and illnesses. In short, a healthier workforce can be a safer workforce; a safer workforce can be a healthier workforce.

Common elements in this integrative health and safety management approach include:[26]

- Building a "whole life" approach to health and safety, which combines both on and off the job dimensions in a vision that leads to a true culture of health
- Stressing the importance and connection of overall health and wellness to safety outcomes
- Recognizing the evolution in the nature of workplace hazards and including this awareness in the development of health strategies

There are also more specific administrative controls that focus on ergonomics by assigning employees to those jobs that they are physically capable of performing. Some recommended procedures are:

- Pinpoint the jobs with the highest ergonomic risk factors.
- Identify the demands of these jobs.
- Understand the capability of the worker.
- Ascertain mismatches between these demands and capabilities.
- Minimize the mismatches through job selection or task modification.

Solutions: Ergonomics

As musculoskeletal injuries, such as lower back pain, carpal tunnel syndrome and tendinitis, are more common in older workers, applying ergonomic principals becomes very important. A well-designed workplace will reduce the risk of injuries for all workers, especially the older population. Ergonomic practices minimize repetitive or forceful movement and maintaining awkward or constrained postures. The benefits that accrue to health care employers are higher productivity and reduced lost time from workplace injuries and illnesses.

In a 2006 publication by the Robert Wood Johnson Foundation, Barbara J. Hatcher lists 11 broad principals, many of which are ergonomic-related solutions (as suggested by Derek Parker, a specialist in medical center design):[27]

1. Nurses walk too much, often up to 12 miles per shift, and this is frequently related to finding supplies and equipment. Physical design has to reduce this burden.

2. Decentralized nursing stations to bring the nurse closer to the patient must be part of the design.

3. Patients are increasingly overweight or obese and physically compromised. Over-bed lifts must be installed.

4. Slippery floors, wires and cords, and equipment make safety an issue. The physical environment should be designed to increase safety.

5. Shift and procedural considerations make lighting very important. Have adjustable lighting options part of the unit design.

6. The pace of nursing requires that simple accommodations be offered for personal needs, such as locating restrooms close to the unit.

7. Nursing units tend to be cluttered. Ensure adequate storage and make certain that workplaces accommodate the completion of documentation and other essential tasks.

8. Equipment is necessary in delivering patient care. Ensure enough room for equipment.

9. Efficiency is lost when areas such as patient rooms are inconsistent in their design. Standardize rooms whenever possible.

10. The color, texture, lighting, contrast, artwork, and other aesthetic features influence patients, families and staff. Consider the context of these features in creating a pleasant work environment.

11. Noise decreases productivity and increases errors. Attend to the acoustics of a unit through wall coverings, use of pagers and the like.

Other practical ergonomic measures applicable to health care facility settings as suggested in a 2005 American Society of Safety Engineers publication are:[28]

- Eliminating heavy lifts and long reaches
- Reducing static standing time
- Installing skid resistant material for flooring and especially for stair treads
- Lengthening time requirements between steps in a task
- Increasing the time allowed for making decisions
- Considering necessary reaction time when assigning older workers to tasks
- Providing opportunities for practice and time to develop task familiarity

Ergonomically designed office equipment that should be available at the various workstations include:

- Adjustable monitors (lowering the monitor for those wearing progressive lenses is preferable)
- Desks with adjustable keyboard/mouse trays
- Palm and mouse rests
- Chairs with adjustability for height, lumbar, back-rest and arm-rests
- Foot-rests for shorter individuals
- Task lighting and workstation placement to reduce glare
- Telephone headsets
- Reduction in high-frequency and background noise sources

A 2011 survey conducted by the Disability Management Employer Coalition and Cornell University found that 85.6% of health care/hospital employers were very or somewhat concerned about the impact of an aging workforce. On the other hand, only 36% of employers participating in the survey have considered aging workforce aspects in designing their absence and disability management programs.[29] These results confirm that health care employers understand the growing trend of an increasingly larger group of older employees, but also that much work needs to be done in implementing those programs to both retain these workers and help them to work more safely.

H. Willis Towers Watson can assist health care clients

Willis Towers Watson has a high level of experience in working alongside clients with health care exposures. In doing so, we assemble a team from our Risk Control & Claim Advocacy group to work with the client's Risk Management and Safety & Health departments with the primary objective of reducing exposures to injuries and the overall cost of risk. Service approach varies with a client's particular circumstances and needs but generally encompasses some or all of the following elements:

- **In-depth claim analyses:** Identification of loss trends to focus risk control efforts on interrupting the sequence of events leading to injuries
- **Safety program reviews:** Evaluation of safety policies and procedures directed at the reduction of potential high loss exposures
- **Onsite visits:** In conjunction with the safety program reviews, implementation of day-to-day policies and procedures is evaluated along with control of physical hazards
- **Employee behavior:** Observation of work practices that may contribute to injury trends when employees deviate from prescribed training and established procedures
- **Ergonomics:** Evaluation of the job physical demands of key work areas; equipment use by employees to reduce manual materials handling is part of this review from both a design and maintenance standpoint
- **Management controls:** Research into such aspects as management and employee safety accountability, hiring practices, turnover reduction initiatives, job rotation to foster a stronger safety culture
- **Client safety training:** Options include train-the-trainer training sessions in person to build supervisory safety knowledge and skills and the use of ongoing computer based training (CBT) resources
- **Compliance consulting:** Addressing OSHA and other regulatory agencies includes compliance strategies for applicable standards

As an initial step, a meeting is scheduled with the health care client's risk management and safety and health contacts at which time an overall service plan is tailored that most benefits the client in reducing workplace injury and illness frequency and cost.

For additional information contact your Willis Towers Watson Client Relationship Manager, your risk control consultant or:

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About Willis Towers Watson

Willis Towers Watson (NASDAQ: WLTW) is a leading global advisory, broking and solutions company that helps clients around the world turn risk into a path for growth. With roots dating to 1828, Willis Towers Watson has 39,000 employees in more than 120 countries. We design and deliver solutions that manage risk, optimize benefits, cultivate talent, and expand the power of capital to protect and strengthen institutions and individuals. Our unique perspective allows us to see the critical intersections between talent, assets and ideas — the dynamic formula that drives business performance. Together, we unlock potential. Learn more at willistowerswatson.com.

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