The Perfect Storm

How the Aging Workforce and the Obesity Epidemic are Colliding in the Healthcare Industry

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Introduction

According to the National Oceanic and Atmospheric Administration and the National Weather Service, a “perfect storm” is defined as a meteorological weather pattern involving the collision of very large high pressure and low pressure systems to create a “once-in-a-lifetime” storm. In the business world, many say a “perfect storm” is a disastrous situation created by a powerful concurrence of factors. In today’s workplaces the two most rapidly changing dynamics of the US workforce are the expanding aging workforce and the ever-increasing obesity concerns. Each of these changing dynamics is a concern for companies alone. But when both of these concerns are present in the workplace at the same time, the impact can be crippling to an organization. Nowhere is this convergence of the aging workforce and the impact of the obese more pronounced than the nursing and healthcare industry. Companies can either batten down and do nothing or they can properly prepare. Either way, the ‘perfect storm’ is fast approaching, and what they choose to do will determine their chance of survival.

Work-Related Musculoskeletal Disorders (WMSDs)

Work-related musculoskeletal disorders, including back injury and upper extremity disorders, are the most prevalent, most expensive and most preventable workplace injuries in the United States today. Musculoskeletal disorders (MSDs) account for $1 of every $3 spent on Workers Compensation in America and affect 1.8 million workers each year, which many experts believe represents significant under-reporting of the true incidence of ergonomic injuries nationally. Compared to other private industry sectors, the medical, economic and social costs of work-related musculoskeletal disorders or ergonomic injuries in the healthcare environment are particularly serious and warrant special consideration.¹

The most recent U.S. Department of Labor (DOL) summary statistics indicate that nursing aides, orderlies and attendants, along with two other occupations (truck drivers and non-construction laborers), account for one out of five musculoskeletal disorders reported nationally in 2001. The American Hospital Association has stated that work-related MSDs account for the largest proportion of Workers Compensation costs in hospitals and long-term nursing home facilities nationwide. In addition, the American Nurses Association reports that ergonomic injuries occur in nurses at a rate that is twice that found in the general working population.¹

Every day nurses suffer debilitating and often career-ending and life-altering injuries from repeatedly lifting and moving patients. Back injuries affect up to 38% of all nurses. More than any other work-related injury or illness, musculoskeletal disorders (MSDs) are responsible for lost work time, the need for protracted medical care, and permanent disability among health care workers. A substantial body of scientific evidence clearly supports efforts to provide workers with ergonomic protections.

The risk factors have been clearly identified: Repeated lifting and forceful movements associated with patient care activities lead to serious health problems for health care workers. Lifting, transferring and repositioning patients are the most common tasks that lead to injury.²
The Patient Handling Dilemma

When workers are required to lift a load, the two primary components that determine whether a “load” can be safely handled by a person are: 1) the “capacity” of the person performing the lift, and 2) the “demand” of the lift.

The Capacity

When we refer to the “capacities” of a person, especially those involved during a lifting task, strength, flexibility, agility, reaction time, balance and endurance are all factors to consider. A deficiency in any of these factors can reduce the worker’s capacity to lift. The capacities of healthcare workers, especially nurses, are rapidly changing. According to the American Association of Colleges of Nursing (AACN), the United States is struggling with two key demographic changes within the nursing profession: a projected nursing shortage, and the aging nursing workforce.

PROJECTED NURSING SHORTAGE

• According to the “United States Registered Nurse Workforce Report Card and Shortage Forecast” published in the January 2012 issue of the American Journal of Medical Quality, a shortage of registered nurses is projected to spread across the country between 2009 and 2030. In this state-by-state analysis, the authors forecast the RN shortage to be most intense in the South and the West.
   http://ajm.sagepub.com

• In October 2010, the Institute of Medicine released its landmark report on The Future of Nursing, initiated by the Robert Wood Johnson Foundation, which called for increasing the number of baccalaureate-prepared nurses in the workforce to 80% and doubling the population of nurses with doctoral degrees. The current nursing workforce falls far short of these recommendations with only 50% of registered nurses prepared at the baccalaureate or graduate degree level.

• In the July/August 2009 Health Affairs, Dr. Peter Buerhaus and coauthors found that despite the current easing of the nursing shortage due to the recession, the U.S. nursing shortage is projected to grow to 260,000 registered nurses by 2025. A shortage of this magnitude would be twice as large as any nursing shortage experienced in this country since the mid-1960s. In the article titled The Recent Surge In Nurse Employment: Causes and Implications, the researchers point to a rapidly aging workforce as a primary contributor to the projected shortage.

• According to a report released by the American Health Care Association in July 2008, more than 19,400 RN vacancies exist in long-term care settings. These vacancies, coupled with an additional 116,000 open positions in hospitals reported by the American Hospital Association in July 2007, bring the total RN vacancies in the U.S. to more than 135,000. This translates into a national RN vacancy rate of 8.1%.
AGING POPULATION

We hear it all the time—our workforce is aging. In 1977, 37 percent of the salaried workforce was under 30 years old compared with only 22 percent in 2002, and only 38 percent was 40 or older in 1977 versus 56 percent in 2002. In 1975, the average life expectancy of Americans was 72.6 years; in 1990, it was 75.2 years, and in 2009 it was 78.2 years.

According to the Bureau of Labor Statistics, of the approximately 300 million people in the U.S. today, 63 million are over 65 years of age, and ten million of them are still working. The number and percentage of older workers will double in the next ten years due to extended careers, second careers, and longer life expectancy.

Nearly two in five workers (38 percent) currently aged 50 to 64 plan to carry on working beyond 65, according to a survey conducted by Chartered Institute of Personnel and Development (CIPD). In addition, those who are not planning to work past 65, 31 percent would change their mind if their employer allowed them to work flexibly, and another fifth say that they would be tempted to carry on working past 65 if they were offered a deferred larger pension.

With this demographic shift employers are faced with a workforce that is more diverse, not only in ethnicity and gender, but also in age. The challenge for businesses is to create a safe and productive work environment that takes into account the characteristics that come with aging.

The aging nursing workforce has their own unique facts:

- The average age of the Registered Nurse is climbing. With the average age of RNs projected to 44.5 years by 2012, nurses in their 50s are expected to become the largest segment of the nursing workforce, accounting for almost one quarter of the RN population.
- According to the 2008 National Sample Survey of Registered Nurses released in September 2010 by the federal Division of Nursing, the average age of the RN population in 2008 was 46 years of age, up from 45.2 in 2000.
- According to the July 2001 report, Nursing Workforce: Emerging Nurse Shortages Due to Multiple Factors (GAO-01-944), a serious shortage of nurses is expected in the future as demographic pressures influence both supply and demand. The future demand for nurses is expected to increase dramatically as the baby boomers reach their 60s and beyond.
- According to a May 2001 report, “Who Will Care for Each of Us?: America’s Coming Health Care Crisis”, released by the Nursing Institute at the University of Illinois College of Nursing, the ratio of potential caregivers to the people most likely to need care, the elderly population, will decrease by 40% between 2010 and 2030. Demographic changes may limit access to health care unless the number of nurses and other caregivers grows in proportion to the rising elderly population.

As we age, there is no doubt changes will occur. In the workplace, the primary design concerns focus on the changes that occur to the physical, physiological and psychosocial capacities of aging employees. Understanding the differences between aging employees and their younger counterparts will better prepare employers to properly accommodate the workforces through proper workplace design.

Where patient handling is concerned, the physical and physiological changes are the biggest concerns.
PHYSICAL

- **Strength** – As the human body ages, it loses muscle mass and strength resulting in less effective abilities, or inability to perform routine activities. With this gradual reduction in muscle strength, the gap between the reduced strengths and the strength demands of everyday life widens.

  The ability of the older worker to perform tasks depends on the capabilities of the muscles to contract in order to overcome the external resistance to cause motion. Decline in the muscle strengths and speed of exertion are due to the atrophy of muscle fibers. The loss of muscle fiber area is consumed by fat tissue during aging. The extent of muscle cell replacement with fat tissue is dependent on the amount of exercise of the muscle, the nutrition of the individual, the prevalence of disease or injury, and sometimes, heredity.7

  The peak of muscle strength in both men and women is reached between the ages of 25 and 35 years old. Between the ages of 50 and 60, most people can produce only about 75-85% as much strength.8

  Figure 1 shows the effects of age and gender on muscle strength, according to data obtained by Hettinger.9

  ![Figure 1: Muscle Power in Relation to Age and Gender](image)

  **Figure 1: Muscle Power in Relation to Age and Gender.**

- **Flexibility** – Body pain, such as back pain, most often affects inflexible people. As workers age, they lose muscle and joint flexibility.

  Joints show a progressive loss of cartilage from the articular surfaces with development of osteoarthritic growths from the bone that are painful and increasingly limit the scope of daily activities. Deterioration in the molecular structure of collagen and elastic tissue also leads to a progressive decrease of flexibility at most of the major joints. By the age of retirement, scores on the ‘sit and reach’ test of flexibility are 18-20 percent poorer than in a young adult.10

  This loss of flexibility has been associated with loss of strength, loss of balance, restricted movement, poor postures, slower reaction times, less accurate movements, increase in myo-fascial pain, slower injury recovery times, increased perception of aging and stress11
• **Balance** - Having good balance means being able to control and maintain your body’s position, whether you are moving or remaining still. As people age, they may have difficulty with their balance.

Many people experience problems with their sense of balance as they age. Roughly 9 percent of adults who are 65 and older report having problems with balance. Disturbances of the inner ear are the main cause. People feel unsteady, as if they are moving, spinning, or floating. Balance disorders are one reason older people fall.12

Falls and fall-related injuries, such as hip fracture, can have a serious impact on an aging person’s life. According to the Centers for Disease Control and Prevention, more than one-third of adults ages 65 years and older fall each year. Among older adults, falls are the leading cause of injury deaths.12

• **Reaction time and speed** – With age, all behavioral responses slow down. Part of this slowing down is explained by the declining efficiencies of the sensory organs and the musculoskeletal system.13 Depending on task complexity, older adults are slower to respond. Response speed has a linear relationship with task complexity. Older adults have more difficulty managing or coordinating multiple tasks. Research has suggested that age-related differences in performance of multiple tasks improve through training and practice.14 Other research has suggested that performance is improved further if the tasks performance order is flexible, meaning that the worker can decide what order to perform tasks without penalty. From a performance standpoint, however, older workers have much more experience than younger workers. Through selective optimization by compensation (SOC), older workers apply previously learned skills to current situations resulting in comparable performance with younger workers.15 This experience may enable older workers to achieve satisfactory performance, which will help them compensate for any slowing. However, when the job demands exceed the worker’s capacity, the older worker may compensate by using increased physical effort or taking fewer rest periods to complete the task in a timely manner. Key considerations include allowance of longer response time, additional practice to increase familiarity, frequent refresher training, frequent reinforcement of task priority, and reduction in the need for simultaneous performance of multiple tasks, or designing the system to be operated with low sensitivity to task order.16

• **Manual dexterity and tactile feedback** – As we age, our motor skills, muscular agility and neurologic sensitivity worsens. Manual dexterity and tactile feedback is impaired. Fine motor skills and movement, detailed physical tasks, sensory perception in the fingers and hands, and discrete control of movements are all compromised.

An impairment of a worker’s fine motor skills, manual dexterity and tactile feedback makes it difficult to perform tasks that require fine movements, sensory feedback, discrete motions and the sense of touch.

Careful consideration should be given to designing jobs that have equipment, hand tools, controls and tasks designed in a manner that is conducive to the aging.
PHYSIOLOGICAL

- **Oxygen exchange** – Aging leads to a progressive deterioration in each of the various links in the oxygen transport chain. The overall consequence is a decrease of maximum oxygen intake from the value of perhaps 45 ml per kilogram per minute found in young women to about 25 to 28 ml per kilogram in a woman at the age of 65 years. Since both figures are expressed relative to body mass, a part of the deterioration in aerobic power is attributable to an accumulation of body fat. However, the main explanation is a reduction of both maximum ventilation and maximum cardiac output.

Figure 2 shows the effects of age in relation to aerobic power of women, according to data obtained by Shephard.

![Figure 2: Aerobic Power in Relation to Age of Women.](image)

- **Respiratory system** – A combination of ankylosis (a fusion of the joints in the chest cage) with increasing bronchitis and emphysema reduces vital capacity and thus increases the work of breathing. The maximum exercise ventilation shows a 25 percent reduction by the age of 65 years, and as much as a 50 percent reduction at 75 years.

Furthermore, the effectiveness of this ventilation in terms of oxygen transport is reduced by an increase in the anatomical dead-space, an impaired matching of ventilation and perfusion, and a reduction of pulmonary diffusing capacity.

- **Fatigue** – Human fatigue can be generated two ways: 1) physiological fatigue, in which a worker’s muscles are overstressed, and 2) psychological fatigue (or mental fatigue), which may be caused by design-induced stress (i.e. complexity, high accuracy demands, or environmental implications, such as noise).

As discussed earlier, workers’ muscles weaken and oxygen exchange rates decrease as they age. These physiological changes have a direct impact of physiological fatigue. Time to allow for physiological recovery will be more frequent in older workers.
The Demand

One only needs to look around to see that the US population is getting heavier. According to the National Center for Health Statistics for Health, in the past few years, the combined percentage of overweight and obese people in the US adult population soared to over 60 percent. Thirty-four percent of Americans are overweight and 33.8 percent are obese. According to the World Health Organization, the number of overweight and obese people worldwide will increase to 1.5 billion by 2015 if current trends continue.

According to Professor W. Philip T. James, Chair of the London Based International Obesity Task Force in 2008, the extreme forms of obesity – severely, morbidly and super morbidly – are rising faster than the overall epidemic. The United States is the undisputed leader in the percentage of overweight and obese individuals as well as the rate at which those numbers are increasing.

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>United States</td>
<td>30.6 percent</td>
</tr>
<tr>
<td>Mexico</td>
<td>24.2 percent</td>
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<tr>
<td>United Kingdom</td>
<td>23.0 percent</td>
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<tr>
<td>Spain</td>
<td>13.1 percent</td>
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<tr>
<td>Italy</td>
<td>8.5 percent</td>
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<tr>
<td>Japan</td>
<td>3.2 percent</td>
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[Source: OECD Health Statistics, 2012]

With patient handling, the “demand” is the size, weight and cooperation of the patient. With many patients being unresponsive or uncooperative during handling and with all levels of obesity on the rise, it is safe to say that the “demands” of the lifts are greater than ever before.

As the weight projections (the demands) of our patients continue to rise and as our workforce continues to age (the capacity) and continues to work past traditional retirement age, the gap between the demand and capacity is widening.

FIGURE 3: OBESITY RATES BY COUNTRIES.

FIGURE 4: CHANGE IN DEMAND AND CAPACITY OVER TIME.
As the demand-capacity gap widens, the patient handling dilemma worsens. How are we to handle the ever-increasing loads with a diminishing and often overworked workforce that is physically and physiologically in decline?

Effective Strategies

As with every corporate concern, having a sound approach and an effective strategy will ensure success. Developing strategies that are designed to help reduce the negative consequences of aging will ensure a safer, more productive workplace not only for aging individuals but for all employees. A broad strategy that addresses both the human side and the corporate side of aging will help organizations survive the impending “perfect storm.”

A comprehensive approach to addressing the aging work force will better position organizations for the future. Organizations must incorporate all-inclusive aging work force programs that address the workplace design issues (e.g., ergonomics; slips, trips and falls; and return-to-work) that will help the aging employee work more productively and safely and address the policies and procedures that will encourage the aging worker to feel valued (e.g., human resources policies and procedures). Also, companies must incorporate programs that help the aging employee to be better prepared for working longer (e.g., wellness, strength and conditioning, and education and training).

The following is an eight-step corporate approach for addressing the needs of the aging workforce.

**FIGURE 5: AN EIGHT-STEP CORPORATE PROGRAM APPROACH TO ADDRESSING THE AGING WORKFORCE CONCERNS.**
Education and Awareness Training

Education and awareness training are critical. Both management and employees need to understand the demographic shift toward an aging workforce and its impact on the organization. For example, it may be appropriate to educate a company’s engineering staff on the physiological changes that occur in aging so that engineers can anticipate these changes and design a workplace and tools to compensate for them. Such compensatory measures would allow worker capabilities to best match the job demands in order to optimize the process for productivity and quality.

Organizations should educate supervisors and managers to become sensitive to the risks of practices that may be age discriminatory and vigilant in looking for and eliminating such practices in recruiting and work assignments.

In knowledge-based industries, companies have an important incentive to retain the aging work force in order to protect their intellectual capital. These companies need to develop transition strategies that focus on leveraging the knowledge of retiring workers in the training and mentoring of young entrants. Human Resources personnel can assist senior management in developing phased or flexible retirement planning. Each change in policy or procedure will need to be accompanied by a plan to educate workers and managers on the significance of the changes.

Wellness Programs

Introduction of wellness programs can help to promote a healthier work force and work environment in general and is one of several interventions that can assist in keeping aging workers, in particular, healthier and productive.

Health risk assessments (HRA) are often offered to employees as a self-discovery process as part of a wellness program. Online HRA questionnaires are most common. Health risk assessments can be coupled with health screenings, which may include blood testing, cholesterol screenings, etc. HRAs are offered through a variety of vendors and help protect the privacy of an employee’s health records.

Results of these assessments are provided to the employee with recommended solutions for reducing any health risks identified. An analysis of HRA results also informs the employer of overall predominant health risks in the work force. Only aggregate reporting is provided to employers so that they may determine higher-level programmatic solutions for the entire population. Some vendors also specialize in wellness programs and offer educational programs for the entire work force on particular health topics such as stress, smoking cessation, diet and exercise.

Since the work force is aging and will experience common age-related issues, wellness programs can help identify potential health risks. Using education, coaching, and other methods, wellness programs can help employers avoid the impact of age-related health risks through early identification and intervention. By implementing wellness initiatives, employers have the opportunity to positively influence the health and well-being of their work force.
Ergonomics

Ergonomics is the science of designing the workplace to help fit the demands of the job to the abilities of workers in order to optimize the job-worker interface and to improve productivity and safety.

An ergonomically balanced workplace can help reduce fatigue, stress, errors, and injuries and help improve productivity, safety and quality. The fundamental ergonomic process followed by most practitioners is a four-step protocol.

1. **Identify the** physical, physiological and psychological **demands** of the job.
2. **Identify the** physical, physiological and psychological **capabilities** of the worker.
3. **Identify the** physical, physiological and psychological **mismatches** between the demand and the capability.
4. **Minimize the mismatches** through education and training, as well as work, tool, equipment and environmental design.

Ergonomic programs have two fundamental control measures: administrative solutions and engineering solutions. Many times concerns can be addressed through a combination of administrative and engineering controls. The effectiveness of each type of control naturally depends on the concern being addressed.

**ADMINISTRATIVE SOLUTIONS**

Administrative controls refer to those actions taken by the management or staff to limit the potentially harmful effects of a physically or mentally stressful job on workers and are achieved by modifying existing personnel functions. Such controls include programs, managerial strategies, policies and procedures. They include, but are not limited to:

- education and training
- job assignments and placements
- job rotation and breaks
- stretching programs
- exercise, strength, conditioning and health programs
- return-to-work strategies

In other words, the control actions are focused on the worker. Improving the capacity of the employees to perform the job will narrow the “Performance Gap” from the capacity side.
ENGINEERING SOLUTIONS

By contrast, engineering controls focus on the job and work environment. The aim is to redesign the job, tools, equipment and environment to achieve control over those risk factors associated with poor performance, such as lower productivity, injuries and illnesses; i.e., narrowing the “Performance Gap” from the demand side. Engineering controls include, but are not limited to:

• task design
• workstation design
• environmental design
• tool design
• manual material-handling design
• equipment design

ADDRESSING THE “PERFORMANCE GAP”

The “Performance Gap” resulting from having jobs with demands that are higher than the capacity of the workers will ultimately create productivity, safety and quality problems and concerns that must be dealt with by the organization. In business, the goal of productivity often increases the demands of the job and pushes the limits of the workers’ capabilities, which then conflicts with safety goals. These business goals of productivity, safety and quality may be further challenged by the fact that the work force is aging. With aging, worker capabilities will change. Adjusting job demands for a better match with the inevitable changes in abilities of the work force, including changes that will occur with aging, is crucial to the success of companies and businesses.

Return to Work

As employees stay in the work force longer, some may find the need to adjust their work activities in order to help prevent injury and maintain productivity. According to the National Council on Compensation Insurance (NCCI), work injury rates are not higher for the aging worker; however, the severity of the injury, including costs and recovery time, is typically higher.

Through the use of ergonomic solutions and adjustments to work activities to allow safer work performance, employees are better able to maintain an active work life. Common return-to-work strategies can also be used to help maintain productivity and help avoid lost time at work. The strategies that can enable individuals returning from an injury to stay at work through making adjustments to their work tasks and that assist in maintaining productivity include:

• assessing high-risk jobs for potential modifications to reduce risk
• performing an ergonomic review of jobs to assist in bringing the demands of the job in line with the physical capabilities of the employee
• having interactive discussions with employees who come forward with concerns related to productivity based on medical issues
• offering flexible schedules
• offering job-share situations or making transfers as needed and appropriate
Assessing high-risk jobs involves the review of the specific tasks associated with the job to determine those activities posing the most risk for injury.

Interactive discussions represent the “open door” policy for employees to bring their concerns related to job performance due to certain medical conditions to their employer’s attention. These discussions can allow employers and employees to identify possible modifications to job functions and tasks, based on medical necessity, to help prevent injury.

Flexible schedules, job-share or transfer options can help reduce the physical or mental stress associated with job functions. This, in turn, can help reduce fatigue and potential injury for the aging worker.

Employers and employees need to work together to establish programs that can assist aging workers to do their jobs safely within their physical abilities. Employers should attempt to fit the job task and tools to the individual for maximum safety. This is especially important for aging workers. Likewise, aging employees need to know their limits. If there are job tasks that they cannot safely do anymore, they need to communicate with their supervisor and consider job accommodations to help protect themselves and their co-workers.

AS EMPLOYEES STAY IN THE WORK FORCE LONGER, SOME MAY NEED TO ADJUST THEIR WORK ACTIVITIES IN ORDER TO HELP PREVENT INJURY AND MAINTAIN PRODUCTIVITY.

Stretching and Conditioning

As one ages, changes may be expected in some individuals, including loss of strength, flexibility, balance and reaction time; deteriorated motor skills; lower oxygen exchange; reduced respiratory function; lower cardiovascular efficiency and higher fatigue rates. Reducing or minimizing these changes is key to helping aging employees work more productively and safely. Use of stretching and flexibility programs prior to performing job functions have been shown to make employees feel and work better.

Corporate programs should be designed to assist and encourage employees to integrate the following components of fitness into their lifestyle and at work:

- cardiovascular and muscular endurance (walking, swimming, bicycling)
- muscular strength (weight lifting)
- flexibility (stretching)
- balance
- coordination and agility

CARDIOVASCULAR AND MUSCULAR ENDURANCE

Cardiovascular conditioning improves the condition of the heart, the circulation system and the lungs. It is considered the primary component of fitness. Aerobic exercises are the basis of cardiovascular conditioning, including large muscle activity, such as movement of the arms and legs. Muscular endurance is produced by aerobic exercise and is measured by the length of time particular muscles can sustain the activity. These components also help with weight management.
MUSCULAR STRENGTH

“Use it or lose it” definitely applies to muscular strength, which is developed by lifting weights or by resistance training. Loss of muscle mass with age is part of a sedentary lifestyle. Maintaining muscle mass can help promote weight management, bone density and improve the ability to do daily activities such as working, walking, chores and recreation.

STRETCHING, FLEXIBILITY AND BALANCE

Improvement in flexibility, balance and coordination help to maintain range of motion in various joints and to prevent falls and bone fractures, and can allow employees to participate in lifelong activities. Flexibility is increased through stretching exercises. Generally, a good stretching program will involve all major muscle and tendon groups that are involved with the work performed. Balance and coordination are achieved through practice and repetition of motions, movements and tasks.

Today, interest in the area of corporate stretching, flexibility, strengthening and conditioning programs is growing, partly due to the success that some organizations have had, but more so because of the ever-increasing needs of the aging work force.

Driver Safety

Many of the issues discussed here are not unique to the aging work force, but they have a disproportionate impact on aging drivers unless appropriate compensating actions are implemented. Encourage employees to maintain their health, which will help them to be better able to drive, both on personal and business-related journeys. Many employees drive personal or company vehicles for business. Examples include employees of companies in the transportation business and also include those of companies that have salesmen and service employees.

KEY AREAS TO EVALUATE

As indicated earlier, aging affects many physical and cognitive abilities. For all employees with driving duties, several key areas need to be evaluated with an extra emphasis on the aging driver. These areas of concern include driving fitness, vision, hearing, physical function, cognition and mental vitality, and ergonomic and adaptive equipment that may be needed.

Employees should get regular medical checkups, eat healthy foods, follow their doctor’s medical advice, exercise, stretch and perform both physical and mental activities to keep their mind and body in good condition to handle driving tasks. Vision is the major area of concern for aging drivers. Encourage drivers to get regular vision exams every two years for ages 41–60 and annually thereafter. Reduced strength and flexibility may diminish a driver’s ability to perform proper lane change maneuvers, use mirrors properly and identify blind spots.

As people age, it is not unusual to see some diminishing cognitive skills. This affects the driver’s ability to be organized, maintain adequate reaction time and deal with distractions. Companies can help aging drivers with route and trip planning, such as by giving them a route with less traffic, showing them how to avoid rush hour traffic, and focusing these drivers on simple, familiar routes.
SLEEP DEPRIVATION AND THE EFFECT OF MEDICATIONS

Sleep deprivation is a physical function that can present many problems for drivers. Exercise is a well-known sleep aid. By increasing flexibility through exercise, drivers can reduce fatigue while driving and make steering, backing up, checking mirrors and looking to the side easier.

Medications are sometimes necessary for aging workers to manage chronic diseases and for mitigation of pain. Some medications can have adverse side effects, including effects on the ability to drive. Medications have different effects and warnings, and some may cause interactions with other medications being taken. Encourage employees to find out the side effects of their medications and to adjust their driving accordingly.

MAKING VEHICLES ERGONOMICALLY CORRECT

The driving task can be enhanced by making the vehicle an ergonomically better fit for the driver. This can include adjustments to the existing vehicle controls and changes in the way the employee approaches the driving task. Depending on the extent of driving duties, training to achieve ergonomic adjustment of vehicle controls, such as the seat, headrest, mirrors, seatbelt and control operations can improve the driver’s comfort and safety. Drivers should also keep hydrated by drinking water or other non-caffeinated drinks, pace themselves and take regular breaks.21

Slips, Trips and Falls

Slips, trips and falls in the workplace are a significant loss issue for workers of all ages and account for about 15 percent of serious workplace injuries and fatalities. Reduction in physical, physiological and certain cognitive abilities, such as vision, hearing and balance, increases the potential for falls in aging employees. The use of certain medications can also affect balance and gait and contribute to falls. Several geriatric studies on falls by the elderly show that falls are particularly serious for aging workers due to the potential for head injuries and fractures. Older workers’ bones can be more brittle and a fall can result in fractures that involve longer recuperation time.

Several risk factors are responsible for the causation of slips, trips and falls. The risk factors range from type and condition of walking surfaces, surface-level changes, maintenance and housekeeping practices, illumination, spills and contaminants to the type and condition of footwear. Human factors such as gait and distraction also can affect the risk of slips, trips and falls. With better understanding and assessment of these risk factors in the workplace, many of these incidents can be prevented.21

SLIPS, TRIPS, AND FALLS IN THE WORKPLACE ARE A SIGNIFICANT LOSS ISSUE FOR WORKERS OF ALL AGES.
Human Resources Policies and Benefits

With the increasing number of aging employees remaining in the work force, there is a greater demand for new and innovative human resources policies and benefits. These relate to evaluation of work performance, how work gets done and new retirement options. HR plays a pivotal role in helping to comply with the legal requirements and in creating innovative benefits that are attractive to the aging work force.

The human resources function can lead a multifunctional taskforce that assists the organization in developing a roadmap that focuses on maximizing the potential of the aging work force. Such a taskforce can help the organization to deal with the important challenges presented by the demographic shift. Important questions to consider include the following.

• How will the demographic shift affect our organization?
• How will we retain essential knowledge, skills and experience in our organization?
• What changes should we consider to our retirement and human resources policies?
• How will our organization meet the challenge of multigenerational needs related to retention, performance, flexibility and training for work force diversity?
• How do we develop and implement creative solutions pertaining to health insurance, life insurance, elder care, long-term care, disability products and retirement options?
• Should we consider innovative approaches to retaining and rehiring retiring workers?

How companies answer these questions varies, but some have implemented the following solutions.

• Many companies are offering mentoring programs whereby the aging, experienced employee helps train and transfer knowledge to newer members of the organization.
• Flexible schedules and work from an alternate location are options that some companies are implementing to help with the retention of valued aging employees.
• Some companies are providing counseling for workers approaching retirement on late-career issues and retirement planning.
• Other companies are rehiring retirees for part-time and temporary work instead of using temporary workers from outside sources.
• Some companies are instituting phased retirement programs, such as granting a leave of absence for up to six months to get a feel for retirement and offering a reduced schedule upon returning from the leave for a period of up to five years.
• Other companies offer opportunities for work redesign initiatives that will benefit the aging workers.

Many of these approaches are new and cutting edge and, consequently, need to be considered with the organization’s culture and business needs in mind. In order to avoid the potential threat of age discrimination litigation, benefit policies must be age-neutral so that they apply to all employees and not a single subgroup. Therefore, care must be taken to consult with legal counsel to assure that policy changes effectively apply to all and do not unintentionally discriminate against any particular employee group.
IN ORDER TO AVOID THE POTENTIAL THREAT OF AGE DISCRIMINATION LITIGATION, BENEFIT POLICIES MUST BE AGE-NEUTRAL.

Conclusions

The growth in the number of aging workers may lead to changes in age norms, particularly in the later career stages. Career stages and the concept of retirement will be in transition, as rising life expectancies will place life roles into a new context. Eventually, employers will see the advantages to hiring aging workers: They are mature, reliable, adaptable, experienced, loyal and have a desire to work.

AN EFFECTIVE STRATEGY IS VITAL

Having an effective strategy to handle the impending concerns is vital. Addressing corporate issues such as policies and procedures, workplace design issues, education and training and employee health and wellness programs will all be necessities in the future. The stakes are high, for employers as well as employees. Ultimately, such strategies and improvements may be the only way of securing the labor.

KEEP EMPLOYEES HEALTHY AND WORKING

Employers will need to find ways to keep their aging employees healthier and working longer. It is important to increase awareness and reduce the risk of injuries for aging workers. Employers, ergonomists, safety professionals and other specialists will know what to look for to avoid hazards in the workplace. In turn, they will be able to implement programs and modify the workplace, processes and procedures to better support the needs of aging employees. Corporate programs and policies and workplace design strategies will help the aging employees perform their jobs more productively and safely.

APPRECIATE THE CULTURE AND VALUES OF OLDER WORKERS

The culture and values of aging workers are significant assets for the companies that choose to attract and retain them. These values include commitment and loyalty to the employer, fewer sick days, reduced injuries and enhanced length of service. Companies need to recognize aging workers importance in the work force and their changing roles in their fields.

SPECIFIC IMPACT ON HEALTHCARE EMPLOYEES

With the ever-increasing weight of patients and the declining physical and physiological capacities of the aging nursing workforce, the gap between the ‘demands’ and the ‘capacities’ is further widening. This widening gap is placing our healthcare workers and nurses at risk, especially with patient handling.

Redesigning the work and the workplace to accommodate for the aging nursing workforce is crucial. Workplace modifications, job/task redesigns and job/duties accommodations will all be necessities in the future. The stakes are high for employers as well as employees. Ultimately, such improvements could be the only way of securing a future supply of labor. By applying new strategies, the workplace can be designed and redesigned so that aging workers have the ability and desire to adapt. Employers will need to find ways to keep their aging employees healthier and working longer.
ACCOMMODATIONS ARE WORTH THE EFFORT

Accommodating the aging worker is important. A comprehensive program with effective strategies and proven workplace designs will help organizations make use of the valuable skills and knowledge that experienced employees possess, rather than fearing the inevitable changes that occur with aging. Aging work force programs can help minimize the risks associated with aging employees and ultimately help organizations to survive the impending “perfect storm.”

A COMPREHENSIVE APPROACH TO ADDRESSING THE AGING WORK FORCE WILL BETTER POSITION ORGANIZATIONS FOR THE FUTURE.

References


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