



**Aged & Community Services  
SA & NT Inc**

## **MATURE WORKERS MATTER**



**Aged & Community Services SA & NT Inc  
246 Glen Osmond Road  
Fullarton SA 5063**

**Contact: Carol Mohan  
Telephone: 8338 7111  
Email: [hacc@agedcommunity.asn.au](mailto:hacc@agedcommunity.asn.au)**

## Project DESCRIPTION

The proportion of direct care staff working in the aged and community care sector aged 45 years or over is almost double that of the national average. Figures from the National Institute of Labour Studies (NILS)<sup>1</sup> show that 60% of the residential workforce and 70% of the community care workforce are aged 45 years or over. The national average is 37%. The higher proportion of older workers in this sector presents a unique and complex challenge to employers. Providing direct care services to clients is physically demanding. When the workforce is predominately female (91% residential and 93% community) as well as ageing, the occupational health and safety implications become primary concerns for the future sustainability of the industry.

The *Mature Workers Matter* project will explore the broader issues and challenges impacting the occupational health, safety and welfare of mature workers in the aged and community care sector. The project will focus on reviewing relevant evidence on specific occupational health, safety and welfare concerns of an ageing workforce. It will then identify successful strategies that are currently being implemented and investigate new strategies aimed at improving injury prevention and return to work outcomes for older workers.

## RESEARCH FINDINGS

### Aged and Community Care Workforce

*“One of the oldest across all industries”*

The aged and community care workforce present one of the oldest age profiles across all industries. The National Institute of Labour Studies (NILS) reported that around 60% of direct care staff working in residential care and 70% in community care are aged 45 years and over<sup>1</sup>. The ABS showed similar trends with 48% of all health and community workforce reported to be aged 45 years and over<sup>2</sup>.

The nature of the tasks involved in aged and community care occupations can be physically demanding and psychologically challenging. With the workforce ageing, a decline in physical capacity is expected. Job demands, however, continue to grow with increased workloads, frailer and more complex clients and higher legal and reporting responsibilities. Although the rate of work-related injury or illness is not age related<sup>3</sup>, the number of compensated injury and disease claims per million hours of work showed an increasing age related trend for those employed in the health and community services industry<sup>4</sup>. This indicates that although the incidence rate of injuries among mature workers is one of the lowest, the period of recovery or incapacity can be age related.

The prospect for employment within the sector is optimistic with the industry growth and general job attrition expected to result in a sizeable number of job openings<sup>5</sup>. However, recruitment and retention of the workforce has always been a challenge. The staffing levels in the industry will inevitably be stretched when considering the ageing of the workforce, the decreasing labour force participation of older adults, the longer period of incapacity and the recruitment issues.

Although there are obvious benefits of having a mature workforce, most organisations still face challenges in terms of supporting their ageing employees. Organisations need to address changes in the workplace culture and start recognising the value of mature workers as well as explore and implement ways of reducing or removing barriers for mature workers to continue working.

## **Ageing and Fitness to Work**

The proportion of mature workers (those aged 45 years and over) is increasing across all occupations. Physiological and cognitive changes are expected due to the ageing process. These changes are often associated with health issues that can limit the productivity of a mature worker. Health limitations and disorders are prevalent among mature workers. A study of a working population in Finland<sup>6</sup> showed 50% of the males and 60% of females aged 55–64 years have long-term illnesses. Statistics based on the ABS Survey of Disability, Ageing and Carers<sup>7</sup> showed that 45.6% of people surveyed aged 45–64 years had retired because of a chronic health condition. An extrapolation of this result further showed that the reduced labour force participation of older Australians due to health issues reduces Australia's gross domestic product by \$14.7 billion annually<sup>8</sup>.

However, health is not influenced by age alone. Changes vary depending on one's age, fitness level and genetics. Factors such as lifestyle, education, socio-economic status and quality of health care are also major determinants of health<sup>9</sup>. These “determinants” often have overlapping influence and as such prove difficult to pinpoint specific effects on one's health. Most of the causes of illness and disorders are preventable and controllable. Lifestyle choices such as alcohol intake, smoking and fitness were shown to be better predictors of subjective and objective health in old age<sup>10</sup>. The Australian Institute of Health and Welfare also reported the effects of health behaviours and risk factors present at a younger age on a person's health in later life, suggesting that the onset of disease or injury in old age can be prevented or its effects minimised<sup>11</sup>. These studies imply that variables other than chronological age are important determinants of health.

Although there is growing evidence that chronological age does not lead to illness or disease, there still is perceived effects of age and health on a person's work capacity. Job demands generally stay the same with time but work capacity usually decreases with age, creating a possible incompatibility between one's physical capacity and work demands. The changes to work capacity associated with ageing and its possible implications will be discussed in the section below.

## **Functional Capacity Changes Associated With Ageing**

Work capacity is highly individualised rather than general to a specific age group<sup>11</sup>. Ageism has brought with it stereotypes of the mature worker that are based on unsupported beliefs and assumptions regarding the ability for mature workers to be productive members of the workforce.

The work capacity of an individual is influenced by factors such as musculoskeletal integrity, sensory abilities as well as psychological function and cognitive abilities.

## **Musculoskeletal Integrity**

*“Older workers have reduced physical strength “*

In general, muscle mass is expected to decline after the age of 30 years resulting in a decline in muscle strength<sup>12</sup>. The number and size of muscle fibres are also expected to decline with ageing<sup>13</sup>. Bone density reduction also begins by the fourth decade of life. There is also age related changes to the elasticity, tensile strength and regenerative ability of connective tissues in ligaments and tendons<sup>14</sup>. The resulting loss of strength and flexibility of musculoskeletal structures contribute to excessive fatigue and an increased risk of disabling conditions such as osteoarthritis. There may also be an increase predisposition for industrial accidents.

However, age is not the only factor that affects the musculoskeletal system. Establishing how much age results in changes to physical capacity would be difficult as capacity is highly specific to an individual and can be influenced by other anatomical or physiological factors such as gender, height or weight. The amount of decline and deterioration can be expected to vary considerably between individuals.

Training and exercise can influence physical capacity in later life. Leisure time physical activity was shown to be a major predictor for functional limitations, disability and mortality in old age<sup>15</sup>. This indicates that regular participation in exercise or physical recreation activities would carry benefits as one age. Comparisons between a trained 60 year old and an untrained 30 year old showed that the muscle strength of the older trained individual exceeds that of the younger person<sup>16</sup>. This would suggest that aged related changes in strength, capacity and endurance can be improved or compensated for by exercise and physical training.

Evidence supports the effects of exercise and training on slowing down bone loss<sup>17</sup>, increasing muscle strength and maximal oxygen uptake<sup>18</sup> and muscle capacity<sup>19</sup>. This further verifies that musculoskeletal strength, flexibility and capacity are influenced by numerous other causal factors apart from chronological age.

## **Sensory Abilities**

*“Older workers have poor eyesight or poor hearing”*

Physiological changes in sensory function are inevitable with advancing age<sup>20</sup>. It has been shown that one can expect changes in their hearing as early as their mid-forties, in vision and touch when they reached mid-fifties, changes in taste can occur at around the mid-sixties and in smell when one reaches their mid-seventies<sup>21</sup>. However, the level of deterioration of sensory abilities is not consistent across all older people and will vary depending on other factors, such as exposures related to one's environment (i.e. exposure to loud noise).

Age-related changes in vision include difficulty in seeing objects, in working under different levels of lighting, in judging distances or in distinguishing colour intensities. The loss of sensitivity to high frequency sounds is a major hearing issue. Other sensory issues that are related to age involve postural control, reduced thermoregulation and reduced skin elasticity<sup>20</sup>.

These limitations in sensory abilities often imply a negative effect on the work performance of mature aged workers. However, loss of sensory abilities can often be compensated. Equipment and technology are readily available to assist mature workers in compensating for decreased sensory functions. Furthermore, this equipment and improved technology will also benefit all workers in terms of minimising the risks of work demands and environment on their sensory system.

## **Psychological Function**

*“Older workers are more stressed out”*

Psychological function, like physical function can not be predicted by chronological age alone. Numerous factors can influence a person’s abilities to cope with and manage stressful situations.

Data from WorkCover SA showed that in 2006–07, 17.4% of stress related claims were made by workers aged 55 years and over<sup>9</sup>. Possible sources of stress for mature workers may include dealing with complex client situations and behaviours, having to make quick decisions, demanding workloads, increasing accountability and the work that generates, changing work requirements, fear of redundancy, lack of career opportunities or financial insecurity<sup>9</sup>. An American study on nursing home nurses showed that workplace emotional strain and age were associated with increased incidence of depression<sup>22</sup>. Although there appears to be more triggers or causes of stress with mature workers, they are better able to cope with stressors at work, focusing on problems rather than emotional responses<sup>14</sup> and have fewer problems with personal control on the job that might trigger stress<sup>9</sup>.

Early and proper intervention is needed to support mature workers in managing and coping with stressful situations as older workers are more susceptible to depression than other age groups<sup>23</sup>. Workplace stress is likely to occur at any age. Triggers to stress can easily be prevented or reduced by better management support and practices. Communication and consultation on workplace issues should be encouraged between management and mature workers (and all workers) to allow them to adapt more easily to changes.

## **Cognitive abilities**

*“Older workers have more difficulty in perceiving, remembering and thinking”*

There is variability in the cognitive capacity of individuals across age groups. Although older people generally are thought to have reduced or declining cognitive function, there is inconclusive evidence that age has a negative effect on cognitive function<sup>14</sup>. Longitudinal studies have also shown that certain cognitive functions such as short-term memory may decrease or the speed of mental processes may slow down with ageing, other functions such as reasoning and problem solving generally remain much the same<sup>24</sup>. Age-related changes in circadian rhythms affect the sleep patterns on individuals which can affect the flexibility of older workers in tolerating shift work<sup>24</sup>.

Cognitive skills and abilities such as vocabulary and writing speed have been found to peak between 40 to 50 years of age<sup>18</sup>. Furthermore, the ability to process complex

problems, the ability to reason, deliberate and comprehend situations and the control of language actually has been reported to improve with age<sup>14</sup>.

Evidence suggests that the cognitive abilities of older people do not actually decrease but is functioning differently from their younger counterparts<sup>25</sup>. This is hypothesised to be brought about by plastic changes in the older brain. As anatomical and physiological changes occur in the brain, older people may be tapping into previously unused or redundant neural circuits in order to compensate for the changes and maximise their cognitive abilities<sup>26</sup>.

Cognitive decline is highly influenced by individually-based factors such as genetics, personal experiences, health, personality, education and social disadvantage<sup>27, 28</sup>.

There is also evidence that indicate that cognitive decline is related to cognitive activity<sup>29</sup>. This suggests that older workers who continue to use and challenge their cognitive abilities will be capable of neuro-cognitive plasticity to compensate for age related changes as well as protective mechanisms against cognitive decline.

## ***Workplace Implications***

*“Older workers are less productive”*

There is an intricate relationship between ageing, work and occupational wellbeing. The physical and cognitive changes associated with ageing are to be expected but there are considerable variation as to how these changes affect the work capacity and occupational health of an individual.

Individual variability associated with ageing and physical capacity makes it difficult to correlate chronological age alone to one’s ability to work. However, the decline in muscle strength, flexibility and capacity brought about by ageing may make the mature worker vulnerable in the workplace. A reduced physical capacity can result in early or excessive fatigue which can predispose a mature worker to industrial injuries. Strategies are available to lessen the risk and impact of age-related changes in physical capacity:

- With evidence suggesting the positive effects of exercise and physical activity, organisations should look into health promotion initiatives that support physical fitness across all age groups.
- Workplace modifications should be implemented to address changes in musculoskeletal integrity of older workers.
- Ergonomic equipment should be available to all workers when carrying out physical demanding tasks.

Sensory loss can be a consequence of ageing. However, the decline of sensory abilities is not consistent amongst older adults. Issues have been raised regarding the effect of sensory loss on the workplace. This may involve:

- Inability for older workers to adjust to poorly lit environment.
- Increased sensitivity to glare.
- Decreased ability to distinguish colours, gauge speed of moving objects or judge distances.

- Hearing impairments may limit older workers in communicating and conversing with other co-workers. It may also increase the risk of not hearing instructions or alarms.
- Issues with balance function, thermoregulation and the sense of touch can also predispose workers when performing tasks in certain environments.

Sensory impairments are often easily overcome or compensated for by using equipment and adaptive aids as well as by workplace modifications. Organisations should look into using technological applications in the workplace to enable workers of all age groups to perform their tasks. Compensatory strategies and environmental modifications that can easily address sensory issues may involve:

- The use of eyeglasses and large text screens for workers with visual impairment.
- Promoting the use of protective eye gear when working in environments that expose workers to glare.
- The use of hearing aids to compensate for reduced hearing abilities.
- Environmental modifications such as minimising obstructions or installing non-slip floor surfaces.
- Promoting the use of protective equipment such as gloves or safety harnesses can improve safety for workers with sensory impairments.

Psychological function is similarly not determined by chronological age alone. Numerous factors can trigger workplace related stress among mature workers and how they cope and manage a stressful situation. Oftentimes, simple strategies can help prevent or reduce the causes of work-related stress. This may include:

- Communicating and consulting with all workers on changes that may or will occur in the workplace.
- Providing support to mature workers if they will be directly affected by workplace changes.
- Offering training opportunities to mature workers to prepare them for changes in the workplace.
- Providing environmental modifications or job re-design to mature workers to enable them to continue working and prevent feelings of exclusion.

Cognitive function also exhibits considerable variability across all ages. As some cognitive function show decline with age, other cognitive abilities improve. Individual health status, education and training levels can highly influence cognitive function in later life. There is also growing evidence that the human brain can compensate for cognitive decline by activating other unused networks in their brain. Organisations should look into strategies that promote lifelong learning in the workplace to maintain cognitive abilities in mature workers. Further training and development not only updates the qualifications of mature workers, it also places them more competitively in the labour market. Initiatives may include:

- Offering ongoing training and development activities to all workers regardless of age.
- Offering mature workers more cognitively challenging tasks.
- Maximising the productivity of all workers by allowing flexibility in the manner a task is performed or completed to enable new compensatory or learning strategies to evolve.

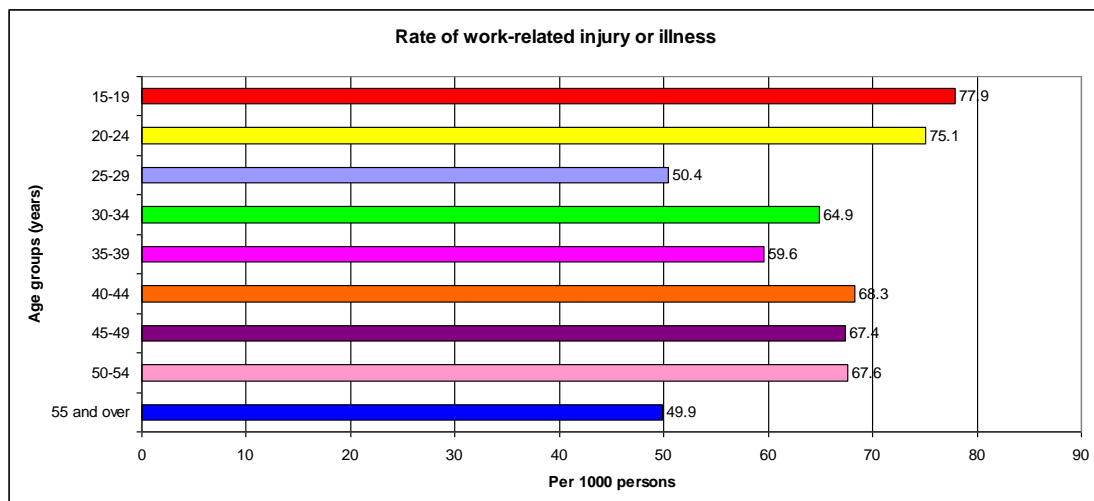
- Promote the concept and benefits of lifelong learning as an individual responsibility.

Although age-related changes can influence some aspects of a mature worker’s capacity, chronological age alone is a weak predictor of productivity in older adults. The productivity of older workers has been shown to be no different from their younger counterparts<sup>30</sup>. Work performances varied more within one age group when compared between age group. Although muscular strength and sensory abilities decline with age, the resulting changes can be addressed with exercise, adaptive equipment or workplace modifications and job re-design. Most cognitive skills such as knowledge or language improve and develop over the course of time while other skills such as creativity or communication hardly change. Perceptions and attitudes on the work performance of mature workers need to reflect the fact that ageing alone does not change one’s capacity to work.

## Injury and Ageing

*“Older workers are more likely to have an injury at work”*

Occupational health, safety and welfare risks can not be based solely on chronological age. The prevailing perception that older workers are predisposed to greater workplace injuries is not supported by any conclusive evidence. Available statistical information on work-related injuries in Australia show that injuries and disease does not increase as one ages<sup>3</sup>. ABS data reported that people aged 55 years and over recorded the lowest rate of work-related injuries/illnesses while those aged 15–19 years recorded the highest.



**Figure 1.** Rate of work-related injury or illness per 1000 persons who worked at some time in the last 12 months.

Likely reasons proposed to explain these findings include<sup>18, 31, 32</sup>:

- Older workers make use of compensatory skills or coping strategies when performing tasks.
- Older workers are likely to use their experience to judge their limits more accurately than their younger counterparts.
- Mature workers have a more serious attitude towards occupational health and safety at the workplace.

- Older workers are more likely to follow occupational health and safety policies and procedures.
- Mature workers are more aware of the potential risks than their younger co-workers.
- Older workers may be performing less physically demanding tasks than their younger counterparts.

An analysis<sup>33</sup> of compensatory claims from WorkCover SA showed the incidence rate (number of compensated claims per 1,000 employees) declined from 1996–97 to 2003–04 across all age groups, with those aged 60–64 years showing the largest rate of decline in the same timeframe. However, the frequency rates (number of claims per million hours worked by age group) showed an increasing trend with age. This may indicate that mature workers have a longer period of recovery or incapacity.

Employees aged 50 years and over and those aged under 50 years were shown to have similar claims profile<sup>34</sup>. The most common injury categories for both aged groups were sprains, back injuries and overuse syndromes. The likelihood of claim duration also increased with age, peaking at the 50–54 year age group<sup>34</sup>. The average paid time off work across all age groups was 7.6 weeks. This peaks at 9.4 weeks for those aged 50–54 years and declines after that. This indicates that although the rate of injury is lower for mature workers, the average weeks of incapacity is higher when they get a work-related injury or illness. This can be attributed to the fact that older adults often report having at least one long-term health condition<sup>35</sup>. The prevalence of existing chronic health issues in mature workers thus can affect their recovery time.

## ***Injury Prevention***

*“Healthy and active ageing”*

The physiological changes brought about by ageing and the associated declines in physical capacity have been given too much emphasis over the synergistic capacity of older workers to adapt to these changes<sup>36</sup>. The majority of the changes on capacity can be addressed by simple and accessible measures. Organisations should begin to explore initiatives that are proactive in terms of delaying, reversing or preventing the functional changes related to ageing.

## ***Return to Work After Injury***

*“Mature workers can safely return to work”*

Although age is not a key factor in the incidence of work-related injury or illness, mature workers show a longer period of incapacity. As mature workers have a higher prevalence of pre-existing chronic health issues, their recovery time from an injury can take longer than their younger counterparts. The longer period of incapacity of older workers would have an impact on the cost of absenteeism for organisations, at a value of \$116.00 more per year over the rest of the workforce<sup>37</sup>. The relationship between age and absenteeism are influenced not only by the health status or severity of illness, but also by an organisation’s “return to work” policy and the rehabilitation practices of the health industry<sup>38</sup>.

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