Chronic disease management support in Australian workplaces – low base, rising need

#### **Abstract**

**Issue addressed:** This study investigates the current nature, levels and perceived need for workplace support among mature age Australian workers with chronic illness.

**Methods:** A cross-sectional population survey was conducted via a double opt-in panel sample of Australian workers aged 45 years and older with one or more of six major chronic diseases (diabetes and/or chronic heart, kidney, lung, mental health and/or musculoskeletal conditions).

**Results:** Three hundred and fourteen respondents reported being in the workforce and having at least one of the chronic conditions under investigation, of which almost one third reported having more than one of the conditions. The findings reveal a number of considerable gaps in Australian workplace support for employees 45 years and older with chronic illness, including workplace flexibility, supportive policies and co-worker support.

**Conclusions:** This research adds to a scarce existing literature base on workplace support for workers with chronic illness in Australia. Future research is needed to identify opportunities for effective public policy and implementation of workplace interventions to better support this cohort.

**So what?** If timely progress is not made in this area, the projected increase in the aged population and scheduled public policy changes impacting retirement age will multiply potential adverse effects on the health of employees with chronic illness and Australia's labour market productivity.

The authors declare no competing interests

#### Introduction

The Australian workforce is ageing and this trend is projected to continue for at least three more decades. Historically, older Australians have had relatively low workforce participation rates. However, lengthening life expectancy and the fear that a smaller proportion of younger people in the paid workforce will have to support an expanding proportion of Australians not in the workforce, has underpinned several recent developments in Australia. Current and scheduled public policy changes encourage higher workforce participation beyond 65 years through tighter eligibility restrictions on age access to superannuation benefits and the means tested age pension, and incentives for pensioners to remain in the workforce past pension age by increasing the amount they can earn before the pension is reduced. In March 2016 there were over 2,089,000 people aged fifty five years or older employed either part-time or full time in Australia. This figure represents almost eighteen percent of the total Australian workforce.

With the workforce set to be older than ever before, workplaces will inescapably have greater numbers of employees with chronic long term conditions as rates of single and multiple chronic conditions increase with age. In Australia, eight in ten workers between 45-74 years have one or more chronic health conditions such as asthma, type 2 diabetes, coronary heart disease, cerebrovascular disease, arthritis, osteoporosis, chronic obstructive pulmonary disease, depression or high blood pressure. Depending on an older person's access to health care and capacity to self-manage including time, training/education and other practical and social support, having a chronic condition can mean a major barrier to adequate functioning or a manageable problem. Chronic illness can also compound normative age-related changes that are important in workplace functioning, including declines in skeletal muscle tone and strength, and vision and hearing loss. 6,7,8 Chronic illness management becomes more complex with each additional chronic condition.

An ageing workforce underlines the importance of considering the adequacy of workplaces to support workers with chronic illness and the potential reduction in health and welfare costs if workplaces were to better support older employees to forestall the progression, severity and disability associated with chronic illness. Workplaces that provide health risk assessments, more opportunity and acceptance of self-management interventions, regular clinical monitoring, health education and/or health promoting activities such as physical activity programs have been shown to more effectively support workers with chronic illness. 9-13 In recent years it has become more important for Australian workplaces to better support those with chronic illness with investigations indicating that Australian workers have less predictable work hours and less protected time for

social activities than previously.<sup>14</sup> Rates of full time average hours of work have increased to over forty hours per week, with extended work time having adverse consequences for family life and personal care, including time to visit doctors and adequately monitor and tend to personal health care.<sup>5,15</sup> Currently available health and related social support in Australian workplaces for employees 45 years and older with chronic disease is largely unknown, as is the perceived need for such support by this cohort. Yet this is important if we are to identify and address shortfalls in support for this cohort, particularly with the policy-related age limit for retirement increasing in Australia.

### Aim

The aim of this study is to investigate current nature, levels and perceived need for workplace support in Australian workers aged 45 years or older with one or more of six major chronic conditions.

### Method

#### Recruitment

This investigation utilised an online multi-purpose research panel to obtain the views of a large cross section of the Australian population aged 45 years or older. The opt-in panel of current Australian residents is owned and managed by PureProfile. Internet panel survey methodology has been used successfully in formal research contexts across a range of health and social science areas and was considered well-suited to the aim of this research. There has been considerable growth in the use of this type of survey methodology since the Internet came into routine use. Benefits of the methodology have been found to include high response rates and a reduction in interviewer effect and social desirability bias, which are common problems with face-to-face methodologies. Na,19,20 Panel surveys also allow an opportunity to conduct otherwise difficult and/or costly research and provide access to participants in much shorter time frames than with more traditional postal or non-pre-recruited on-line surveys. Numerous research studies support the reliability and validity of on-line surveys for attitudinal and behavioural research and to reach specific groups. All the population survey was conducted between November and December 2015. Eligible panel members were reimbursed for the online survey completion by way of a small payment of around \$1.00 (\$AU) or by accrual of incentives. Completion of the online survey was taken to indicate consent.

## Survey Instrument

The original survey instrument was adapted from that previously developed by Glasgow, which investigated the use of a broad range of social and health support resources for those with chronic illness living in the USA.<sup>25</sup> Basic demographic and use of a regular medical practice question

responses are analysed and reported alongside workplace specific support responses. The survey tool utilises an ordered continuum of five response categories, ranging from 'not at all' to a 'great deal', with a midpoint of 'a moderate amount' and required respondents to choose one option that best aligned with their current experience. Workplace specific questions asked eligible participants to self-rate the extent of workplace support received over the past six months across a number of discreet areas including work schedule, opportunities for wellbeing and exercise, workplace policy and co-worker support, and paid time off work for healthcare appointments.

### Data Analysis

The first step in the survey data analysis was the application of a weighting to support an investigation of a suitably representative sample i.e. the full set of 2620 respondents were weighted to population benchmarks by state, age-group and gender, sourced from the most recent Australian Bureau of Statistics quarterly population estimates using ABS.Stat.<sup>26</sup> Weighting used the generalised regression approach outlined in Särndal et al<sup>27</sup> to ensure weights satisfied the benchmark distributions. All data are reported as weighted proportions. All analyses were conducted in SPSS v23 applying the identified appropriate weights. Associated unweighted sample counts are provided to allow an understanding of the number of responses on which proportions were calculated. This research was funded by the University of Technology Sydney, Faculty of Health. The survey and study were approved by the University of Technology Sydney Human Research Ethics Committee (ETH15-0073). This work is part of a larger project investigating the support needs of Australians with prevalent chronic conditions.

# **Results**

# **Demographics**

The full set of respondents (2620) was restricted to those respondents (1001) with at least one of the chronic conditions under investigation. Of those, three hundred and fourteen study participants reported being in the Australian workforce and having one or more chronic (long term) health problems i.e. diabetes, chronic heart, kidney, lung, mental health and/or musculoskeletal (e.g. arthritis) and form the core for this analysis. The majority of participants were aged between 45 and 64 years. Participant demographics are provided in Table 1.

### Table 1 about here

Almost one third (32% n=101) reported having two of the chronic conditions under investigation. Chronic condition prevalence in this cohort of one hundred and one workers reporting multimorbidities is provided in Table 2.Chronic musculoskeletal problems were the most commonly reported co-morbid condition (n=135). Diabetes (n=119), chronic mental health problems (n=66) and chronic heart problems (n=46) were also frequently reported.

### Table 2 about here

Table 3 provides the breakdown of responses across each chronic condition for all survey questions, while table 4 provides a breakdown of responses by each 10 year age grouping from 45 to 74 years to allow differential analyses. Worksite support and resources to assist in the management of chronic illness were reported to be of moderate, large or to a great extent important in at least 42% of those with diabetes, chronic heart or chronic mental health problems. Those with chronic lung problems were least likely to report workplace support and resources as being of great importance. With regard to differences across age groupings, workers aged 45 to 54 years were more likely to consider workplace support and resources to be moderately to greatly important (45%), while this response range among those 65-74 years was only 16%.

Respondents were asked about the flexibility of work schedules to accommodate chronic illness management. A nil to moderate availability of a flexible work schedule was the most common response across the majority of survey participants. Exceptions to this were those aged 65-74 years with 61% reporting a large to great extent of workplace flexibility and workers with chronic lung problems who reported a work schedule that could be adjusted to meet their needs (52% reported a large to great extent). Those with diabetes were least likely to report this benefit with 38% reporting a nil to small extent of support in this area. The availability of formal workplace rules and policies that made it easier to manage chronic illness, such as time off work for health programs was also investigated. The large majority of respondents across age groupings and chronic illness types reported nil-small availability of these workplace supports.

Co-worker support i.e. covering for others when they needed to do something to manage their chronic illness or were not feeling well, was also found to be at very low levels across illness types with between 54% and 64% of respondents in every disease type reporting a nil to small supportive co-worker environment in this regard. The poorest level of co-worker support was reported by those with diabetes and chronic musculoskeletal problems with 62% and 64% reporting a nil to small level

of support. Those aged 65-74 years reported the lowest levels of co-worker support with only 36% reporting a moderate, large or great level of support, compared to the 45-54 and 55-64 year old ages groups which reported 43% and 38% respectively.

Little support was also reported to be available in workplaces for paid time off to attend health care or wellness activities. Almost eighty percent of respondents with chronic mental health or musculoskeletal problems reported a nil to small extent of support in this area. Workers with chronic heart problems more commonly reported a high level of support related to paid time off work to attend health care or wellness activities with 37% reporting a moderate to great extent. Considering age differences, workers with chronic illness aged 45-54 and 55-64 years were more likely to report a moderate to great extent of workplace provision of paid time off to support health care or wellness programs than those 65 years or older (24%, 27 and 19% respectively).

Finally, the majority of respondents reported low levels of workplaces providing wellness programs or fitness facilities. Those with musculoskeletal problems, diabetes and chronic kidney problems reported the least support in this area, with the lowest proportion reported by people with chronic musculoskeletal problems where only 11% reported a moderate to large provision. The availability of this type of workplace support is not distributed evenly across age groups with 23% of those aged 45-54 years reporting a moderate to great extent of provision of wellness programs or fitness facilities by the organisation, while only 6% of those aged 65 years or older reported this rate.

Table 3 about here

Table 4 about here

### Discussion

This research investigated current workplace support for those with chronic illness. It found a scarcity of support across a number of areas where workplaces could provide valuable assistance to those with chronic illness and at the same time support improvements in population health, and the likelihood of older worker availability and productivity. Studies conducted overseas have found similar results of little or no workplace support for workers with chronic illness while others found the need for greater workplace support than levels currently available. 28,29, 30,31

Over fifty percent of respondents in this investigation considered workplace support for their chronic health problem as nil to small in terms of importance. Individual health status is likely to be a key reason behind this finding, as older workers in Australia with one or more major chronic illnesses are more likely to be healthier than those not employed and to self-rate their health as better than those with a major chronic condition who are not employed.<sup>5</sup> The scheduled public policy changes encouraging higher workforce participation beyond 65 years through changes in pension age and superannuation access will soon impact decisions of older Australians with chronic illness to remain in the workforce, whether or not they continue to be reasonably healthy with long term conditions.<sup>2</sup> Older workers with chronic illness that remain in relative good health are more likely to be in professional roles with higher salaries and thus be less reliant on government welfare for retirement income compared to those more adversely affected by chronic illness who will be required to remain in paid employment longer once pending policies changes are implemented.<sup>5</sup>

Another potential explanation for the poor perception of importance of workplace support for chronic illness is a low expectation of workplace support among workers. There are currently no formal requirements for Australian workplaces to provide support for employees with chronic illness beyond occupational health and safety, and leave entitlements. There are also very few available benchmarks in government sectors or large corporate groups in Australia for specialised workplace support for people with chronic illness. The large health charity Cancer Council NSW provides additional leave to any staff member with a diagnosis of cancer and provides advice and support to external organisations to better support staff with cancer, including information on creating cancer friendly workplaces through policy and practice changes. <sup>34,35</sup> Sound evidence of the positive effect of workplace support for health problems has been available for over two decades. <sup>36-44</sup> The range of workplace interventions for those with existing chronic illness include those based on the design of the work environment; health promotion initiatives; return-to-work programs; workplace reorganisation; physical aids; community-based support services and physical activity support

programs. This research indicates an evidence to practice gap currently exists in workplace support for chronic illness. One reason for this may be that workplace health approaches must be supported by adequate resources and relevant long term organisational commitment and change, including policy adjustment, if they are to be successful. <sup>45</sup> Under existing leave policies, Australian workers, no matter what their age or health status, are eligible for the same number of sick leave days. A review of regulation and individual workplace policies to support the harmonisation of sick leave and other entitlements to the demography and epidemiology of chronic disease may better assist workers with chronic illness to continue in the workforce. Research indicates that employees become more committed to a workplace when support services are offered, as they perceive their wellbeing to be valued by the workplace, which in turn motivates loyalty and reliability. <sup>10</sup>

This investigation found a high proportion of workers forty five years and older reporting inadequate workplace flexibility to address chronic disease healthcare needs. Inflexible workplaces have been shown to impact the capacity of those with chronic illness to self-care, manage illness appropriately and seek appropriate care from health professionals. 30,31 The lack of flexibility and support currently available to those with chronic illness in Australian workplaces is likely to explain, at least in part, why 60% of Australians with chronic illness do not participate in the labour force.<sup>32</sup> However, Australian workplaces could potentially provide an avenue to improve the health and wellbeing of Australians with chronic illness. 46 Australia's Productivity Commission suggests that even modest improvements in health would appreciably reduce fiscal pressures on the health sector, which is the leading contributor to economic pressures in Australia.<sup>47</sup> The Australian Law Reform Commission recently led an inquiry into implications of an ageing population and age barriers to work.<sup>48</sup> In its deliberations, the Commission described the demographic shift underway in Australia toward a greater role for older Australians both economically and in society more generally. It noted a range of legal and non-legal barriers to achieving and sustaining this greater role for ageing Australians including the need to ensure work environments, practices and processes facilitate the ongoing participation of mature age workers, such as flexible working arrangements and other approaches that take account of health challenges, physical illness, injury and disabilities as they arise.

This study found co-worker support to allow those with chronic illness to manage their condition, attend appointments or cover when they were not feeling well to be low, with between 54 and 64% of participants across chronic illness types reporting a nil to small extent of support. One explanation of this finding may be that employees stay fewer years with one organisation and are more autonomous, hence may be less dependent on colleagues, than previously. <sup>49</sup> A lack of supportive policy may be a further explanation to the reported low levels of co-worker support. Voluntary leave

sharing to support co-workers for personal medical or other social reasons are available in some western countries however Australia has no comparable public policy and employees are unable to share or donate leave entitlements with other workers.<sup>50,51</sup> There has been some community push for such provisions, although not specifically chronic illness related at this time, and these remain contested by small business organisations in Australia.<sup>52</sup>

This research adds to a scarce literature base on workplace support for chronic illness in Australia. Future research is needed to identify potential opportunities for workplace interventions and public policy support for workers with chronic illness. A recent systematic review conducted overseas identified the need for future workplace health promotion programs for older workers to be adequately designed so that their effectiveness and cost-benefits can be properly assessed.<sup>53</sup> Identifying any significant differences in the need for support for chronic illness across various workplaces and worker roles in Australia, is also required. Likewise, an understanding of the need for differential support for distinct chronic conditions is another important knowledge gap. A better understanding of international approaches that have been successfully embedded in long term policy and practice changes that are likely to fit with the Australian context would support implementation in Australian workplaces. Finally, the need to understand the preferences for workplace support among workers with chronic illness is especially important. Academic studies that provide some useful information on these areas may currently exist across a diverse range of disciplines including human resources, organisational management, occupational health and safety, health and social science, workplace policy, to name a few. Hence, a wide-ranging scoping investigation across disciplines would support a more comprehensive understanding of progress and prevailing obstacles in this field of inquiry.

## Limitations

This study used a cross sectional design which means causal assertions cannot be made. While self-report surveys are generally accepted as appropriate for this study type, it is difficult to know whether participant responses can be generalised across all workplaces as significant variation exists across Australian workplaces in terms of worker types and work requirements. Some confidence can be gained however from the largely consistent responses given by study participants across illness types and/or age across each of the survey questions. Some participants with multi-morbidities may have under-reported the full range of chronic illnesses they experience.

# Conclusion

Improving workplace participation among Australians with chronic illness offers a range of tangible and intangible benefits to individuals and society. Examining chronic illness support among older workers is an essential step to policies and practices targeted at the growing aged population in Australia. Differences in older workers with chronic illness, the broad variety of workplace settings, and the changing nature of work add to the complexity of this increasingly important field of research.

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