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Health and wellbeing of women in midlife: Findings from the Australian Longitudinal Study on Women's Health

Report prepared for the Australian Government Department of Health

May 2022

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LIST OF ABBREVIATIONS AND ACRONYMS

AIHW ..... Australian Institute of Health and Welfare

ALSWH ..... Australian Longitudinal Study on Women's Health

BMI ..... Body Mass Index

COVID-19 ..... Coronavirus Disease 2019

CESD-10 ..... Center for Epidemiological Studies 10 Item Depression Scale

DFLE ..... Disability Free Life Expectancy

GP ..... General Practitioner

MOS ..... Medical Outcomes Study

NHMRC ..... National Health and Medical Research Council

NITW ..... Not in the Workforce

SARS-CoV-2 ..... Severe acute respiratory syndrome coronavirus 2

SF-36 ..... 36-Item Short Form Survey

TLE ..... Total Life Expectancy

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1. EXECUTIVE SUMMARY

The Australian Longitudinal Study on Women's Health (ALSWH) is a population-based study examining the health and wellbeing of over 57,000 Australian women. ALSWH follows women in four age cohorts born in 1921-26, 1946-51, 1973-78, and 1989-95. Women in the first three cohorts were first surveyed in 1996. The first follow-up survey occurred in 1998 for the 1946-51 cohort, 1999 for the 1921-26 cohort, and 2000 for the 1973-78 cohort. Cohorts were then resurveyed on a three-yearly basis (Dobson et al., 2015), and since 2011, the 1921-26 cohort has been surveyed each six months. Women in the 1989-95 cohort were recruited in 2012-2013 and have been surveyed annually until 2017 (Loxton et al., 2018), and again in 2019 and 2021. The study takes a comprehensive view of all aspects of health (not just reproductive and sexual health) throughout women's lifespan.

This report aims to use this longitudinal data collected across the four cohorts of women in the ALSWH to focus on health and risk factors in midlife. The women in the 1973-78 cohort are just entering their middle years (now aged 43-48), and the 1946-51 cohort are in their 70s, while the 1989-95 cohort are in their late 20s. Consequently, while the report concentrates on changes for women in the 1946-51 cohort as they age from their 40s to their 70s, the report also contrasts the experience of these women with those of the 1921-26 cohort (who may shed light on these women's future health expectations) and those of the younger cohorts as they move into their middle years. These findings aim to improve understanding of midlife for women in Australia and the implications for health and wellbeing in midlife and beyond. They can help identify intervention points at earlier stages of women's lives to reduce risk of adverse outcomes and inform preventive health policy and targeted intervention strategies to improve women's health and wellbeing over the medium and long term.

1.1 Overview of the four ALSWH cohorts across the life course

The initial analysis used longitudinal data from ALSWH collected since the baseline survey in 1996 to the most recent data points. These data provide an overview of health and key factors across the four cohorts, essentially covering the life course from early adulthood to old age. This overview clarifies the changes across the course of

women's lives, often showing progress in health states, but also highlighting areas of rising concern, with each generation of Australian women:

- Successive cohorts of women are: better educated, less likely to smoke, more likely to undertake sufficient physical activity for health benefit, but more likely to be overweight or obese.
- The 1989-95 cohort, the youngest in ALSWH, have poorer self-rated health and poorer mental health, as is clearly evident in comparison with the 1973-78 cohort.
- Rates of obesity have increased rapidly in the 1989-95 cohort compared with previous generations. Over 20% were obese by their late 20s, a rate not seen in the 1973-78 cohort until their late 30s, and not until women in the 1946-51 cohort were aged in their 50s.

1.2 Then and now: Comparing two generations of women during midlife

Longitudinal data for women in the 1973-78 and 1946-51 cohorts were compared across midlife, with a specific comparison point used for when women in the 1973-78 cohort were aged 40-45 in 2018 with the 1946-51 cohort when women were aged 45-50 in 1996. This showed that:

- The prevalence of overweight and obesity increased over time for women in both cohorts. The increase was greater among the 1973-78 cohort who were more likely to be overweight or obese at the age of 40-45 in 2018 than the older women were when they were aged 45-50 in 1996 (57% compared with 45%).
- The 1946-51 cohort were more likely than the 1973-78 cohort to meet Australian Guidelines for fruit and vegetable consumption, physical activity and sitting time, and alcohol consumption.
- Both cohorts, showed a decline in smoking over time, with less than 10% of the 1973-78 cohort being smokers in their 40s, a rate substantially lower than for 1946-51 cohort around that age. While smoking in the 1946-51 cohort has continued to decline to less than 5% by their 70s, in the 1973-78 cohort the rate of decline in smoking has slowed in recent surveys.

- Most chronic conditions considered in this report increased with age. These included diabetes, arthritis, cancer, heart disease, urinary incontinence, and difficulty sleeping, together with more doctor visits and poorer self-rated health.
- Consistent with the higher rates of obesity for the 1973-78 cohort in their 40s, the prevalence of diabetes at age 40-45 is already around 5% and is on the rise. This prevalence only occurred for the 1946-51 cohort when they were 50s. Similarly, there are early indications that women in the 1973-78 cohort in their 40s are tracking higher than expected for both heart disease and urinary incontinence when compared with the 1946-51 cohort.
- The mental health of women in the 1946-51 cohort improved with age, with measures of depression, anxiety, and stress all showing a consistent decline. For the 1973-78 cohort, however, after an initial decline there was a sharp rise in depression, anxiety and stress scores, since their mid-30s or since around 2010, that has yet to show a shift to a decline again.
- There were some other notable differences between cohorts, possibly reflecting changes in medical practice. Asthma prevalence increased over time but was much more common overall in the 1973-78 cohort. For hysterectomy less than 5% of the 1973-78 cohort had the procedure by age 40-45 years, compared with more than 20% of women in the 1946-51 cohort by age 45-50.

1.3 Social and personal circumstances

We compared the patterns of change in the social and personal circumstances of women in the 1946-51 cohort as they age from their mid-40s to their 70s with those in the 1973-78 cohort (from their 20s to their early 40s). This showed that:

- In terms of employment, women in the 1946-51 cohort not in the workforce most of the time had the lowest 36-Item Short Form Survey (SF-36) scores for mental health and physical functioning at each age point compared with other employment categories that showed little difference. Similarly for the 1973-78 cohort, though here the category combined part-time employment and not in the workforce.
- For relationship status, those in the 1946-51 cohort who were always partnered had the highest SF-36 scores mental health and physical functioning scores, while those were single or were no longer in a partnership had the lowest. Again

similar differences were evident in the 1973-78 cohort (with the differences being clearest for physical functioning as the women approached their 40s).

- Social needs and roles of women are a key factor in women's lives, with women in both cohorts who reported lower levels of social support having the lowest mental and physical functioning score across the age range. This was similarly the case for women who needed help with daily tasks and for those who had a caring role related to mental health.
- Women in the 1946-51 cohort at age 68-73 who reported a fall to the ground in the previous 12 months were found to have markedly lower social and physical function and mental health scores and a higher percentage were stressed about different aspects of their lives (from relationships with spouse and children to health and managing on their income). The same findings were seen for those who ever had reported a fall to the ground.

1.4 Abuse and violence in midlife

The surveys of interpersonal violence reported by the women covers the experience of childhood abuse, domestic violence, and sexual abuse.

- At age 45, half of the women (52%) in the 1973-78 cohort reported experiencing interpersonal violence compared with 36% of women at that age in the 1946-51 cohort.
- On average, women in midlife who have reported interpersonal violence also experience poorer physical functioning, poorer mental health, worse social functioning, and consistently higher levels of stress.
- Among mid-aged women, use of health services (GP visits, specialist consultations, etc.) was higher for women who had experienced interpersonal violence, which was consistent with women in the 1973-78 cohort at age 45 years.

1.5 Then and now: Comparing two generations of women in their early 70s

Women in the 1946-51 cohort, aged 70-73 in 2019 were compared with women at the same age in 1996 in the 1921-26 cohort:

- In their early 70s, women in the 1946-51 cohort generally had better scores across the domains of SF-36 Health Related Quality of Life than the older generation of women in the 1921-26 cohort at the same age. This was clear for *general health* and *vitality*, but particularly so for *physical functioning* and *role physical* (limitations in activity or participation in terms of physical functioning) and similarly for *role emotional*.
- The 1946-51 cohort were also less likely to smoke but had a higher prevalence of obesity than the 1921-26 cohort.
- Women in the 1946-51 cohort had better self-reported general health and lower prevalence of a range of symptoms, from poor memory and eyesight problems, to breathing difficulties. The exceptions were stiffness or painful joints (which were the same across cohorts) and a higher prevalence of leaking urine in the 1946-51 cohort compared to the 1921-26 cohort, which is consistent with the higher rates of obesity in the younger generation.
- The relationship with health service use by the 1946-51 cohort in their early 70s is not straightforward. These women had a higher prevalence of specialist and hospital doctor attendances, but with a lower proportion having seven or more GP visits in the previous year, when compared with the 1921-26 cohort. These differences may reflect changes in the health system and policy since 1996.

1.6 Women's attitudes to ageing and their outlook for the future

A qualitative analysis of the free-text responses from women in the 1946-51 cohort when aged in their late 60s and early 70s has provided a rich narrative on their diverse perceptions of ageing. Five major themes were identified:

- *Attitudes towards health with ageing* were expressed as an anticipation of worsening health over time, attention to activities that support health, and perceptions of (both positive and negative) changes to mental health with age.
- *The experience of slowing down* that included acceptance and reflection on past experiences and achievements.
- *Loss of independence and reduced capability due to ageing* with views expressed on the implications and limitations, including on forming relationships and the need for support.

- *The impact of financial security on life choices and health*, including concerns about the future and managing on their income, and the difficulty of undertaking paid work, that contrasted with others who felt financially secure.
- *Life transitions and changes in purpose and identity*, including experiences of both positive adjustment to and the difficulties of coping with life events such as retirement or bereavement – ranging from a loss of purpose and social isolation, to taking on new opportunities for work, study, and caring roles with grandchildren.

1.7 Implications and recommendations

Compared to women in the 1946-51 cohort, women in the 1973-78 cohort in their early 40s are generally better placed in terms of their physical and mental health and across various aspects of their lives including education levels and participation in the workforce, than the previous generation. However, there are a number of key areas of concern, that have important implications for their health and wellbeing going forward:

The comparatively higher rates of overweight and obesity in the 1973-78 cohort already appear to correspond with the higher trajectory of diabetes prevalence (and possibly with higher rates of leaking urine) compared with the older generation. Further research on cancers and cardiovascular disease will confirm if these are also on a higher trajectory than seen in the 1946-51 cohort.

- **Recommendation:** Further research and interventions are needed to reverse the rising obesity rates that risk undoing the current health and wellbeing advantage this generation has otherwise gained, with increased risk of chronic conditions going forward and their associated demand on health services.

Progress on smoking cessation, which shows the 1973-78 cohort has a lower prevalence of current smokers than the older generation, which appears to have slowed. If this slowing continues, then smoking rates may by higher than the older generation by their 60s.

- **Recommendation:** Smoking cessation research and preventive health policy needs to focus on women in the late 30s and early 40s (in addition to initiatives directed at younger women) to support them quitting before the major health

consequences of later midlife develop, such as cardiovascular disease and cancer.

The rise in depression, anxiety, and stress scores since around 2010 in the 1973-78 cohort are yet to show signs of a return to the expected trajectory of improvements with age as seen in the 1946-51 cohort. With the challenges posed in recent years by major life-events, including those related to the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pandemic and major disasters, such as bush fires, we may see a further rise in these markers of poor mental health.

- **Recommendation:** research should continue to focus on the depression, anxiety, and stress levels seen in these women, which if worsening further due to recent events, would underscore the importance of initiatives to return the trajectory to improving mental health with age.

The high prevalence of women in the 1973-78 cohort who reported the experience of interpersonal violence by their early 40s, with the poorer physical functioning, mental health, social functioning, and consistently higher levels of stress.

- **Recommendation:** interpersonal violence is a major issue that remains unresolved for women; one that requires on-going policy initiatives and research to evaluate progress and to help mitigate the substantial health and wellbeing consequences going forward.

The low participation in the workforce in the 1973-78 cohort (and supported by similar findings in the older generation) is consistently linked with poorer mental health and physical functioning scores.

- **Recommendation:** further research is needed on the direction and causal pathways for these relationships and initiatives are needed to focus on increased workforce participation across midlife.

If there are clear warning signs on overweight and obesity in the 1973-78 cohort, then there should be alarm bells ringing on the rapid increase for the 1989-95 cohort. These women in their late 20s already have overweight and obesity rates not seen in previous generations until much later, even decades older in the 1946-51 cohort.

- **Recommendation:** Intervention studies and preventive health strategies are needed that are targeted at women prior to midlife with corresponding research evaluation of their efficacy, if we are to mitigate the increased risk of chronic diseases and burden on health service use in the decades ahead.

Compared to the 1921-26 cohort, there is some evidence that women in the 1946-51 cohort may have better self-reported health and health-related quality of life scores. However higher rates of obesity in this cohort may limit gains in healthy ageing.

2. INTRODUCTION

ALSWH has been collecting data on women in three cohorts (born 1921-26, 1946-51 and 1973-78) for 25 years, and on women in the 1989-95 cohort for eight years. Over this time the women in the 1946-51 cohort have aged from 45-50 in 1996 to 68-73 when last surveyed in 2019. The ALSWH has documented the changes in the women in this cohort as they have progressed through midlife, capturing the social, biological, behavioural, community and environmental factors associated with health, wellbeing and health service use. The ALSWH has documented, for example, trajectories in the women's physical and mental functioning and quality of life, transitions in social and personal relationships and caregiving roles, development of chronic diseases and multimorbidity.

This report aims to use longitudinal data collected from women in the ALSWH to assess factors affecting women's health in midlife. The women in the 1973-78 cohort are just entering their middle years (now aged 43-48), and the 1946-51 cohort are in their 70s. These two cohorts tell us what the middle years have been like for women born in the post-war baby boom, and what they might be like for the next generation who are now entering midlife. Moreover, data from women in the 1921-26 cohort provide information on where the women who are now entering their 70s might head, based on their current trajectory. In turn, data from the 1989-95 cohort provide a glimpse of their prospects for their midlife years. Overall, these findings will improve understanding about intervention points at earlier stages of women's lives to reduce risk of adverse outcomes, with the goal being to inform preventive health policy and intervention strategies.

3. OVERVIEW OF PARTICIPANTS IN THE AUSTRALIAN LONGITUDINAL STUDY ON WOMEN'S HEALTH

3.1 Key points

- Successive generations of women are: better educated, less likely to smoke, more likely to undertake sufficient physical activity for health benefit, but more likely to be overweight or obese.
- The cohort born in 1989-95 differs from the previous cohorts, even at the same age. They have poorer self-rated health and poorer mental health.
- Rates of obesity have increased rapidly in the 1989-95 cohort compares with previous generations. Over 20% were obese by their late 20s, a rate not seen in the 1973-78 cohort until their late 30s, and not until women in the 1946-51 cohort were aged in their 50s.

3.2 Introduction

The purpose of this chapter is to provide an overview of the demographic and health-related characteristics of women participating in the ALSWH in all four cohorts – the 1989-95 cohort (recruited in 2013) and the 1973-78, 1946-51 and 1921-26 cohorts (all recruited in 1996). This will set the scene for subsequent chapters which provide greater depth of insight into the health and wellbeing of women in the 1973-78 and 1946-51 cohorts, including their use of health services.

The graphs shown below summarise data from women who participated in each survey, conducted about three years apart over almost 25 years. Most of the graphs are plotted by age and illustrate similarities and differences between women in different cohorts across an age range of more than 70 years. However, some of the graphs are plotted by the year in which the survey was conducted in order to examine whether there are changes (e.g., in taxes or laws) which may impact all cohorts simultaneously.

3.3 Demographic characteristics of women in all cohorts

3.3.1 Area of residence

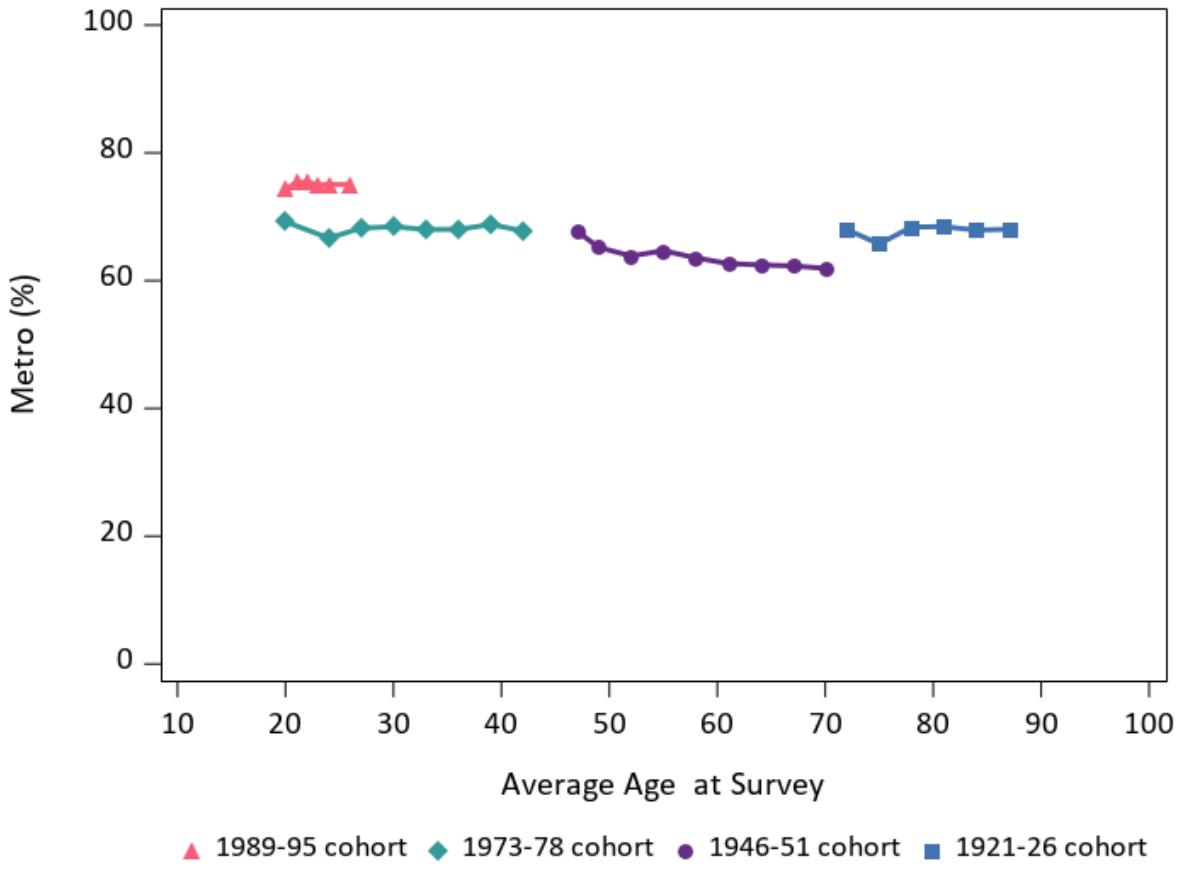

Figure 3-1: Percentage of women living in metropolitan areas by age for each cohort.

Figure 3-1 shows the percentage of women living in metropolitan areas (rather than regional or remote areas) by age and cohort. Women in the original cohorts (1973-78, blue; 1946-51, green; 1921-26, purple) were selected so that there was a greater representation of rural women than in the general population. This explains why they are less likely to live in metropolitan areas when compared with both the 1989-95 cohort and the general population. In contrast, the women in the 1989-95 cohort (shown in red) were recruited differently, without over-sampling in rural and remote areas and are roughly representative of the area residence for young women at that time (Mishra et al., 2014). Hence the youngest group of participants comprise the highest proportion living in metropolitan areas. Notably while individual women may

have moved location over time, the proportions of respondents living in metropolitan areas have remained fairly steady.

3.3.2 Relationship status

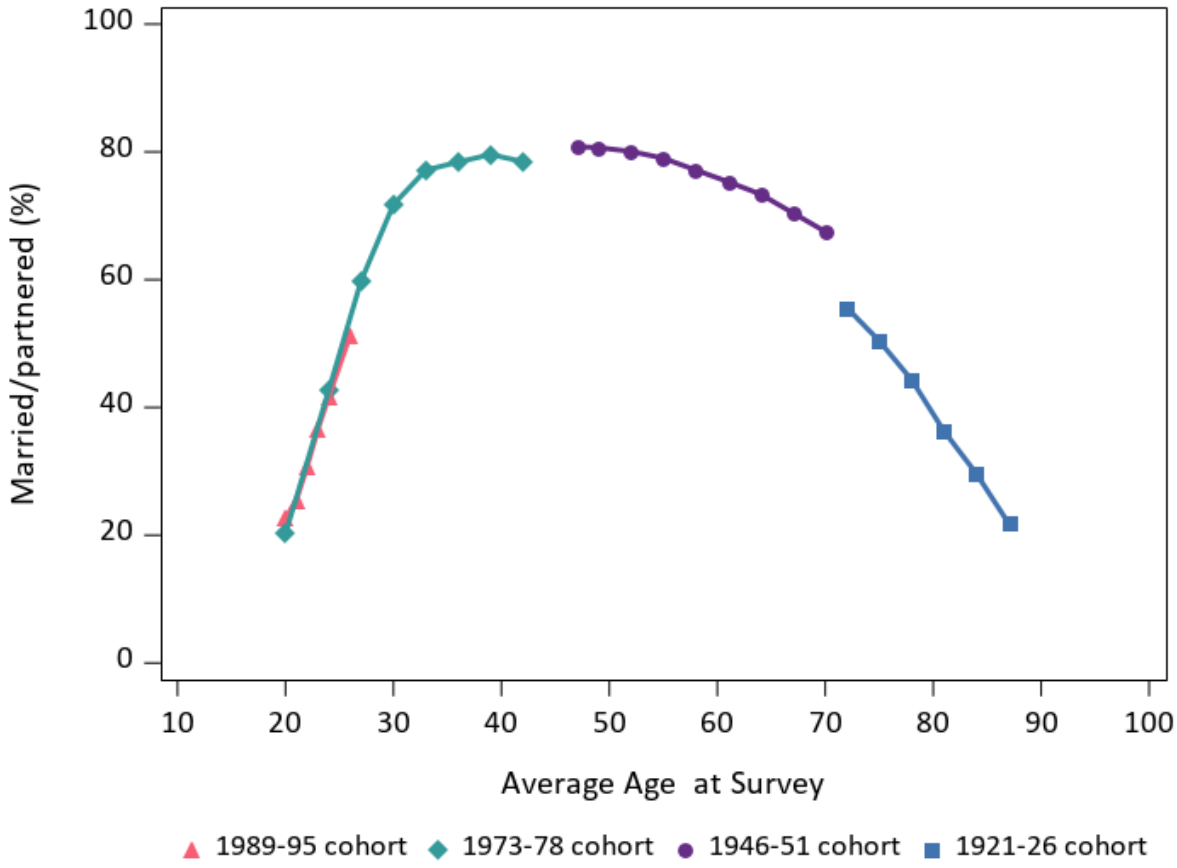

Figure 3-2: Percentage of women who are married or living with a partner by age for each cohort.

The life-course stages of getting married or living with a partner, followed by a lower prevalence of these relationships (e.g., due to widowhood, separation or divorce) later in life, track similar trajectories across the cohorts (Figure 3-2). Indeed, the paths of the youngest two cohorts are so similar that the lines (red and green) overlap. Though this needs to be confirmed with more data, there are initial signs of a peak for the 1973-78 cohort at age 40 years, with the decline in the prevalence of these relationships starting about a decade earlier than was the case for the 1946-51 cohort. At older ages there is also evidence of a difference emerging, with proportionately more of the 1946-51 cohort (green) remaining married when they reached the age of 70 than in the oldest cohort (1921-26, purple) when they were at the same age. This

may be due to improvements in life expectancy for men. The changes in relationships in the different cohorts will be explored further, later in this report.

3.3.3 Education

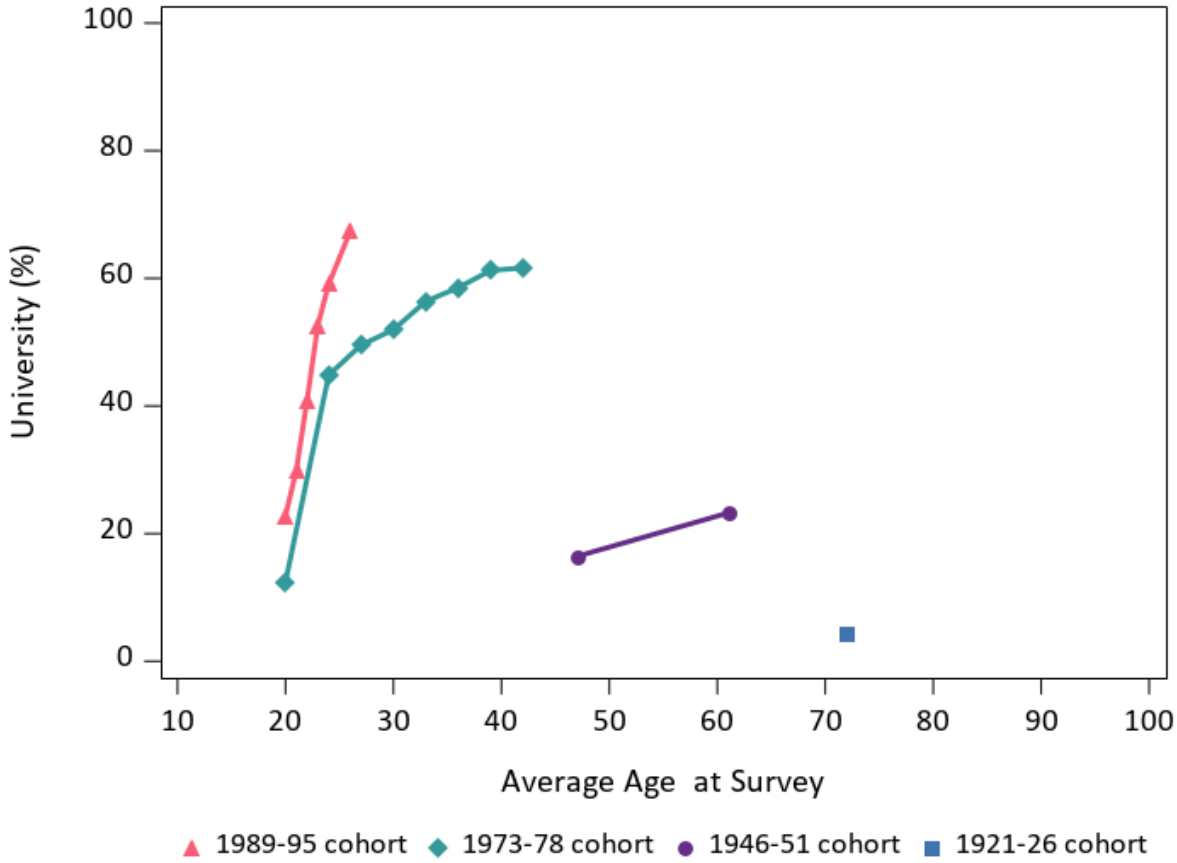

Figure 3-3: Percentage of women with university education by age for each cohort.

An important determinant of women's health and wellbeing across their lifespan is the level of education they attain (with associated socio-economic effects). Figure 3-3 shows substantial differences between the cohorts. Throughout their early 20s the youngest women increased their education, so that now about 70% of these ALSWH participants have university degrees (this exceeds the national figures for women in this age group). ALSWH follows a common pattern for longitudinal studies of women, tending to have a selection bias towards those with higher education levels. However, the broad trends or differences between cohorts should still be indicative of what is happening across the population.

The experience of the 1973-78 cohort was somewhat different with the proportion with university education increasing steadily from their mid-20s until the most recent survey when they were in their early 40s. Also of note is the increase in the proportion with tertiary qualifications in the 1946-51 cohort, representing midlife educational advancement (Tooth & Mishra, 2017). In contrast, far fewer women in the older cohorts had a university education.

3.4 Health and health related behaviour

This section provides an overview of patterns of health risk and protective factors across all four ALSWH cohorts, with emphasis on similarities and differences across ages and over time. Detailed findings on the health of ALSWH participants during midlife is presented in later chapters.

3.4.1 Mental health

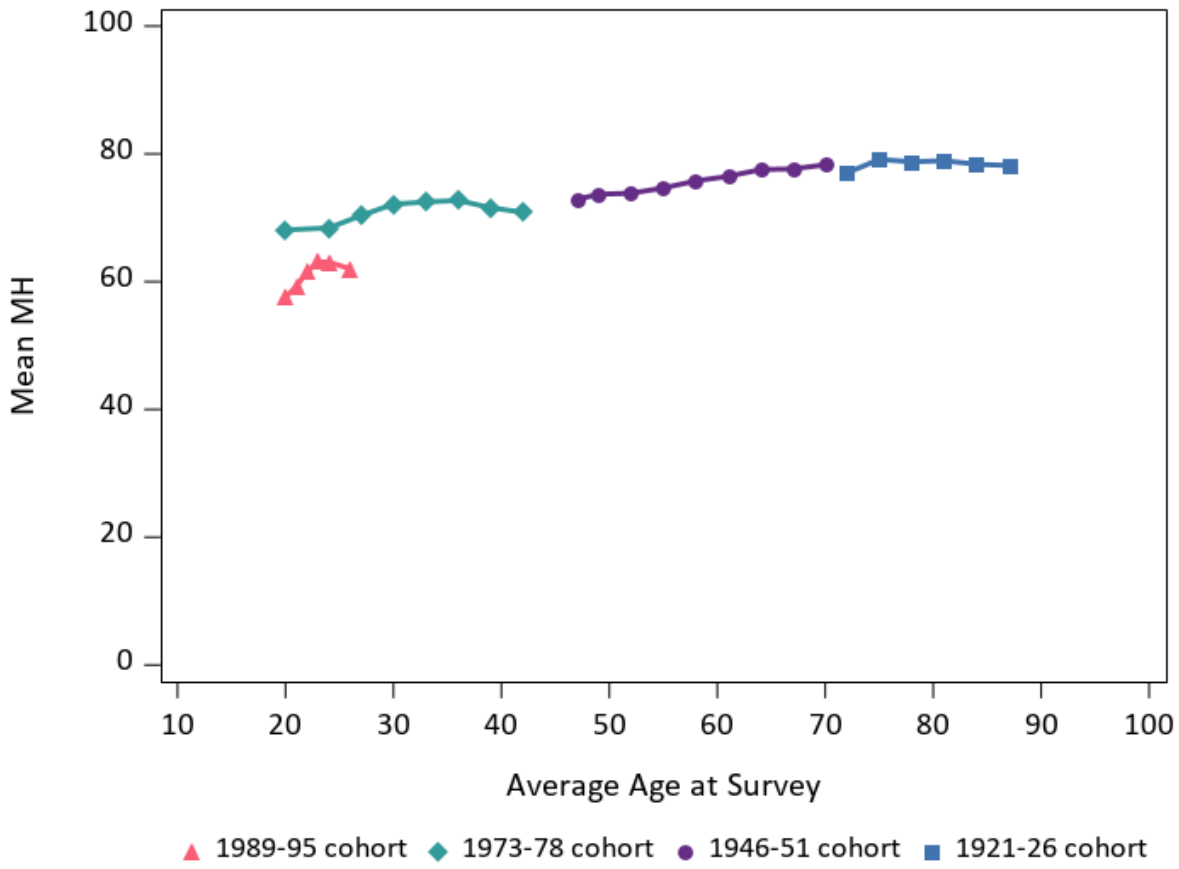

Figure 3-4: Mean score for mental health by age for each cohort.

Poor mental health and psychological distress are measured in various ways in the ALSWH surveys. One measure is the mental health score obtained from the SF-36 quality of health-related life scale (used for the three older cohorts); another is the Kessler 10-item scale (used for the 1989-95 cohort, with scores that can be converted to be comparable to those from SF-36). In Figure 3-4 mental health scores range from zero to 100, with higher scores representing better mental health. The graph shows two distinct patterns. For the older cohorts, mental health increases gradually with age. For the youngest cohort, mental health scores are clearly lower than for the previous cohort when they were the same age (as shown by the gap between the red and blue lines).

These patterns are also seen in all other measures of mental health, including scales measuring anxiety and depression, self-reported doctor diagnoses of anxiety or depression, and prescriptions for anti-depressant and anti-anxiety medications (Holden et al., 2013).

3.4.2 Self-rated health

The women provide an overall assessment of their health at each survey by responding to the question “In general would you say your health is” with response options of “excellent”, “very good”, “good”, “fair” or poor”. Figure 3-5 shows the percentages of women reporting their health as excellent or very good.

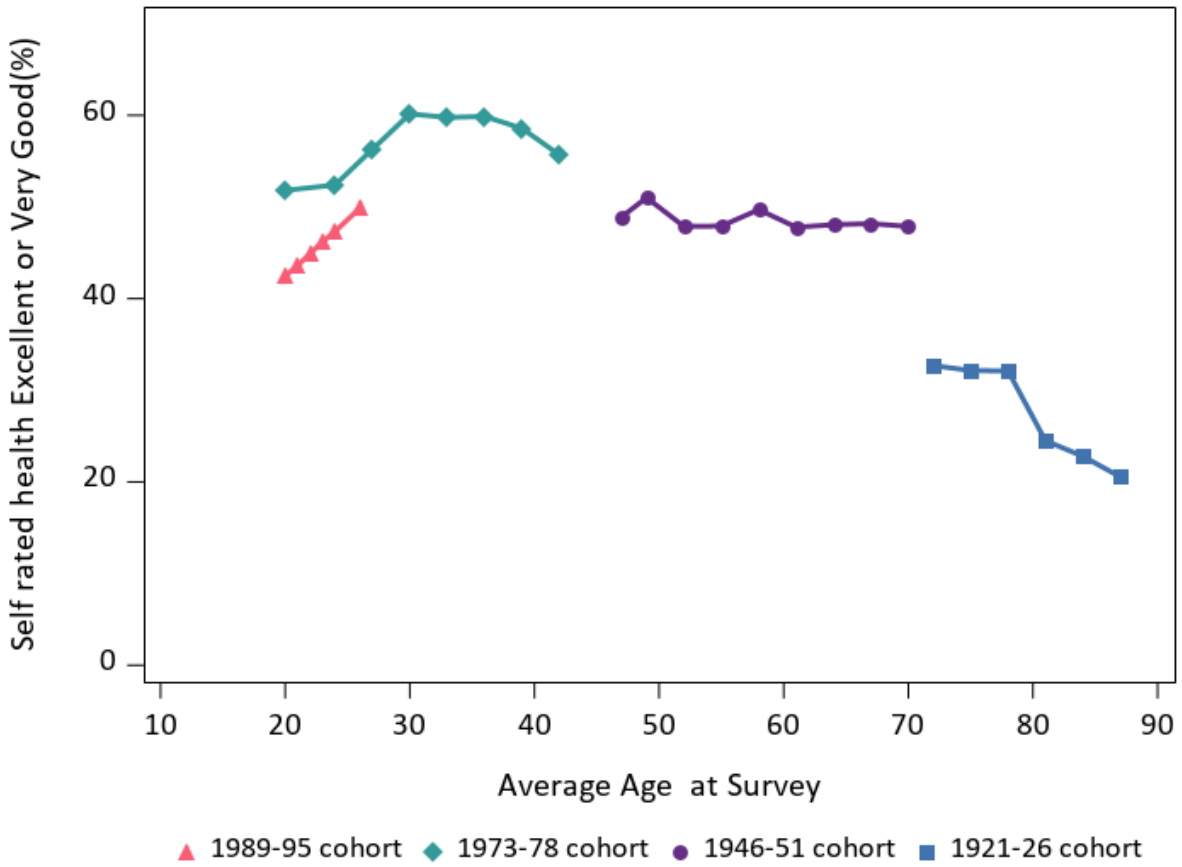

Figure 3-5: Percentage of women rating their health as "excellent' or "very good" by age for each cohort.

As might be expected self-rated health declines across the cohorts, especially for the women in the 1921-26 cohort who have aged from their 70s to their 90s during the study so far. This decline in self-rated health for the older women was also apparent in other summaries of physical health and is explored in greater depth in later chapters.

Less expected is the poorer self-rated health of women in the 1989-95 cohort, though this may be associated with their poorer mental health scores (see above) and with differences in other risk factors as shown in the following sections.

3.4.3 Cigarette smoking

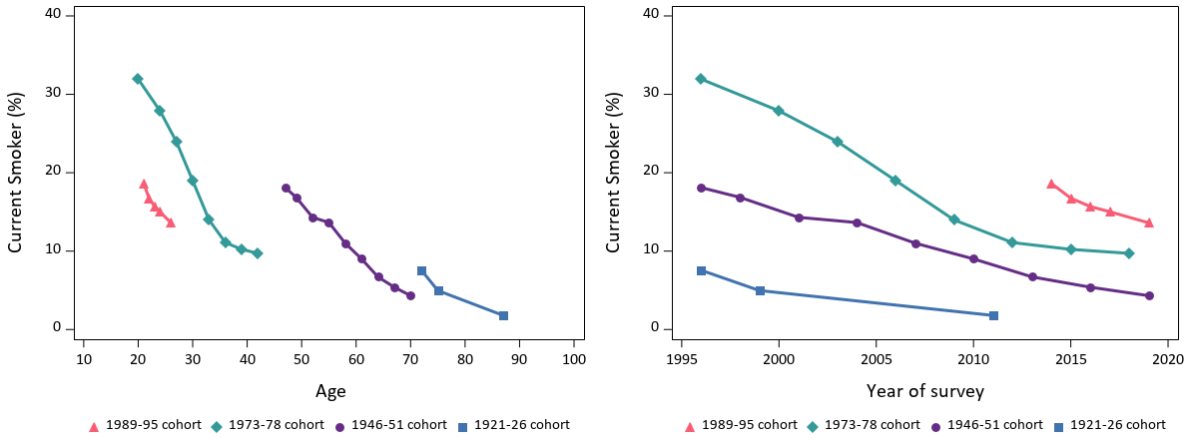

Figure 3-6: Percentage of current smokers in each cohort, shown by age in the left panel and by calendar year in the right panel.

Tobacco smoking is the major cause of the burden disease in Australia (AIHW, 2021). The prevalence of cigarette smoking among women in Australia has been declining steadily for many years. This is clear from the left panel in Figure 3-6. While each successive cohort from 1921-26 to 1973-78 started at a higher level of smoking prevalence in 1996, the 1989-95 cohort has a much lower prevalence than the 1973-78 cohort did at the same age. (*Note*: Vaping/use of e-cigarettes is outside the scope of this report).

The pattern of decline in smoking across all cohorts is also clear when the percentage of smokers is plotted against calendar year (right panel of Figure 3-6). These graphs illustrate the cumulative effect of multiple anti-smoking measures implemented over time that impacted similarly across all ages – including restrictions on locations where smoking is permitted, increasing taxes on tobacco, restricted advertising, and plain packaging.

3.4.4 Prevalence of obesity

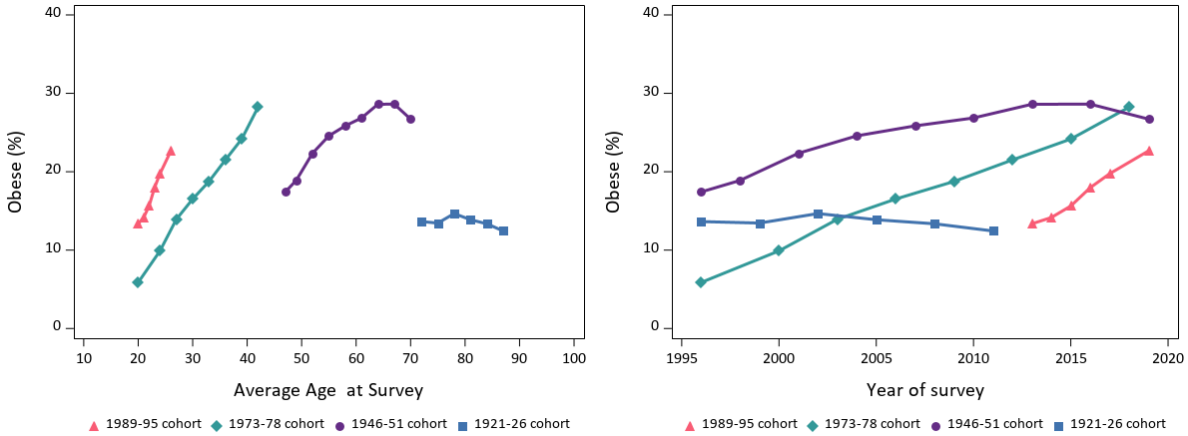

Figure 3-7: Prevalence of obesity in each cohort, shown by age in the left panel and by calendar year in the right panel.

After tobacco use, overweight, including obesity, contributes the next largest burden of disease, disability and death in Australia (AIHW, 2021). Figure 3-7 shows the changes in the prevalence of obesity across the different ALSWH cohorts over time. A higher percentage of women in the 1989-95 cohort (red) were obese when they were aged 18-23 (at their first survey) than were the 1973-78 cohort (blue) at the same age (left most points for both lines). Obesity has also increased rapidly in the 1989-95 cohort. Similarly, prevalence of obesity at age 40 was higher among the 1973-78 cohort (right end of blue line) than among the 1946-51 cohort (left end of green line) when they were aged in their mid-40s, and it is continuing on an increasing trajectory. In contrast, for the 1946-51 cohort obesity increased for about the first 20 years of the study but then plateaued and decreased – this may be due to more obese women no longer participating in the surveys (possibly due to poorer health) or to weight loss due to decreasing muscle mass and poorer health. There is also a substantial difference in obesity between the 1946-51 and 1921-26 cohorts, with the older women having much lower prevalence at the baseline survey.

Our previous study of the impact of weight on older women's life expectancy and self-rated health from age 70 showed that, compared to women in the normal body mass index (BMI) range, obese women had a lower total life expectancy, fewer healthy years, and more unhealthy years (Leigh, Byles, & Jagger, 2016). Overweight women had a slight increase in total life expectancy, but fewer healthy years. Underweight women had the shortest life expectancy, including both healthy and unhealthy years.

This knowledge from the 1921-26 cohort has implications for the 1946-51 cohort as they enter their later years with higher BMI.

The right panel in Figure 3-7 illustrates how different cohorts have different trajectories according to calendar year. Unlike the patterns for smoking (all declining from differing baseline levels), the patterns for obesity are less consistent. This illustrates that the patterns are not affected by factors acting similarly on all cohorts, but rather that different generations are responding differently to cultural and environmental factors that can affect body mass. Further research is needed to understand the underlying drivers of these trends in obesity.

3.4.5 Physical activity

Australian guidelines define levels of sufficient physical activity for health benefit. For adults, the recommendation is to be active most days, preferably every day. Each week, adults should do: 2.5 to 5 hours of moderate intensity physical activity, 1.25 to 2.5 hours of vigorous intensity physical activity, or an equivalent combination of moderate and vigorous activities. Figure 3-8 shows the percentages of women meeting the physical activity recommendations.

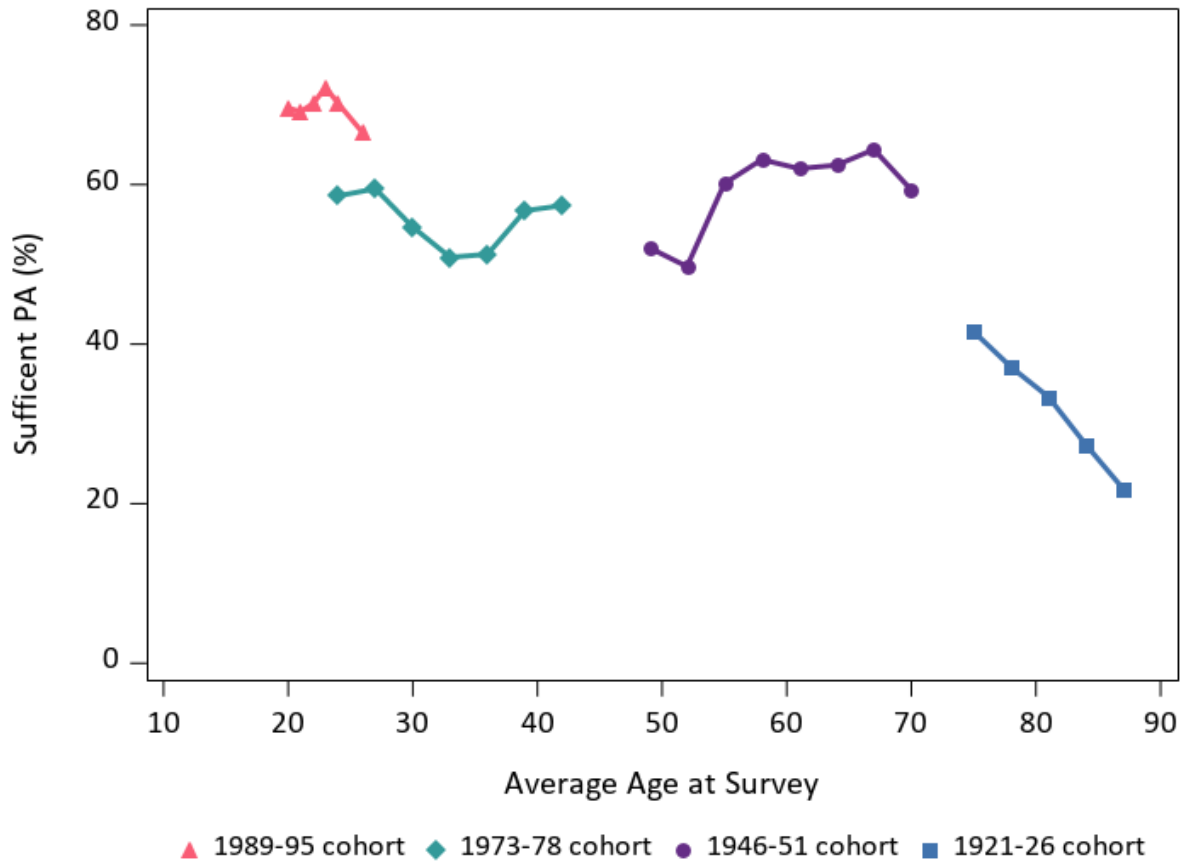

Figure 3-8: Percentage of women doing sufficient physical activity for health benefit by age for each cohort.

Patterns of physical activity follow the life course with about 70% of women meeting the guidelines when they are in their 20s, then fewer during their 30s when they are more likely to have young children, after which physical activity increases until declining sharply after the age of about 70 in both the 1946-51 and 1921-26 cohorts. This early decrease in the 1946-51 cohort may signal an age or life stage opportunity to promote continued or increased engagement in physical activity as necessary for healthy ageing.

4. MIDLIFE THEN AND NOW: COMPARING TWO GENERATIONS OF WOMEN DURING MIDLIFE

The purpose of this chapter is to take a closer look at the health and wellbeing of women in midlife by following the experience of two cohorts over more than 20 years. These are women in the 1973-78 cohort, who were aged 18-23 years in 1996 and 40-45 in 2018 when they completed Survey 8, and women in the 1946-51 cohort who were aged 45-50 years in 1996 and 68-73 by 2019 when they completed Survey 9. When the original samples were selected, women living in rural and remote areas were purposely over-represented relative to their numbers in the population. The data presented here have been weighted to adjust for this imbalance so that estimates are generalisable to the Australian population.

4.1 Key points

- The prevalence of overweight and obesity increased over time for women in both cohorts. The increase was greater among the 1973-78 cohort who were more likely to be overweight or obese at the age of 40-45 in 2018 than the older women were when they were aged 45-50 in 1996 (57% compared with 45%).
- The 1946-51 cohort were more likely than the 1973-78 cohort to meet Australian Guidelines for fruit and vegetable consumption, physical activity and sitting time, and alcohol consumption.
- Both cohorts, showed a decline in smoking over time, with less than 10% of the 1973-78 cohort being smokers in their 40s, a rate substantially lower than for 1946-51 cohort around that age. While smoking in the 1946-51 cohort has continued to decline to less than 5% by their 70s, in the 1973-78 cohort the rate of decline in smoking has slowed in recent surveys.
- Most chronic conditions considered here increased with age and were more prevalent in the 1946-51 cohort. These included arthritis, cancer, heart disease, urinary incontinence, and difficulty sleeping, together with more doctor visits and poorer self-rated health.

- Consistent with the higher rates of obesity for the 1973-78 cohort in their 40s, the prevalence of diabetes at age 40-45 is already around 5% and is on the rise. This prevalence only occurred for the 1946-51 cohort when they were in their 50s. Similarly, there are early indications that women in the 1973-78 cohort in their 40s are tracking higher than expected for both heart disease and urinary incontinence when compared with the 1946-51 cohort.
- The mental health of women in the 1946-51 cohort improved with age, with measures of depression, anxiety, and stress all showing a consistent decline. For the 1973-78 cohort, however, after an initial decline there was a sharp rise in depression, anxiety and stress scores, since their mid-30s or since around 2010, that has yet to show a shift to a decline again.

  There were some other notable differences between cohorts, possibly reflecting changes in medical practice. Asthma prevalence increased over time but was much more common overall in the 1973-78 cohort. For hysterectomy less than 5% of the 1973-78 cohort had the procedure by age 40-45 years, compared with more than 20% of women in the 1946-51 cohort by age 45-50.

4.2 Risk factors for health and wellbeing in midlife

4.2.1 Body weight

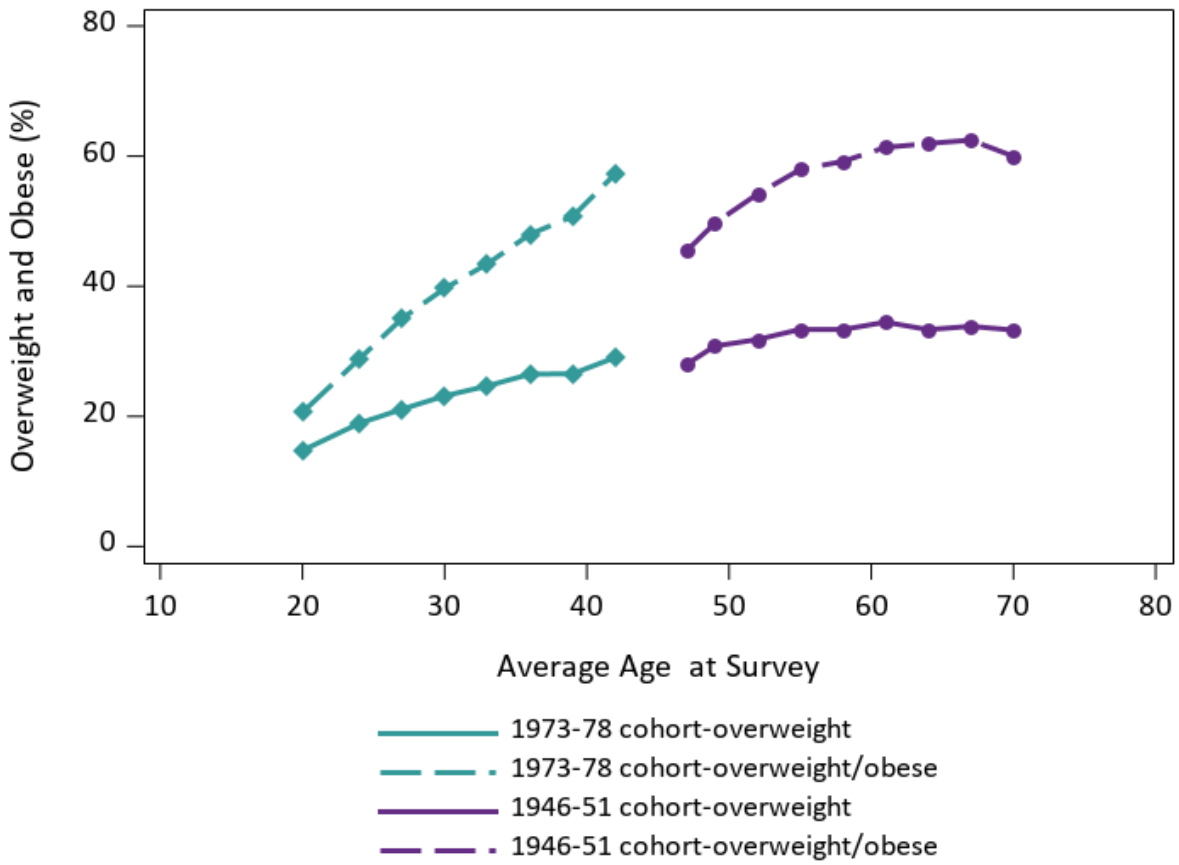

Figure 4-1: Percentages of women who were overweight, or overweight or obese by age for each cohort.

Figure 4-1 shows increasing prevalence of overweight (solid lines) and overweight or obesity (dotted lines) among women in both cohorts. The percentages for overweight rose steadily with age so that the 1973-78 cohort at 40-45 years has similar prevalence to the 1946-51 cohort when they were aged 45-50 (29% and 29% respectively). The rise in obesity, however, was much steeper in the younger women so that at age 40-45, they had a prevalence of overweight or obesity of 57% compared with a prevalence of 45% among the 1946-51 when they were aged 45-50. If this trend continues, the 1973-78 cohort are more likely to experience weight-related conditions, such as type 2 diabetes and heart disease, in their later years than the women in the 1946-51 cohort. We are already seeing evidence of increased risk of diabetes among

women in the 1973-78 cohort, and particularly for those remaining heavier for longer (Luo, Hodge, Hendryx, & Byles, 2020).

4.2.2 Diet and nutrition

ALSWH has collected data on food intake using various measures. Due to the length of time needed to complete food frequency questionnaires, they have been used intermittently at specific surveys. However, two questions - about consumption of fruit and vegetables - have been asked consistently in most surveys. Australian Dietary Guidelines recommend eating at least five serves of vegetables and two serves of fruit per day (NHMRC, 2013).

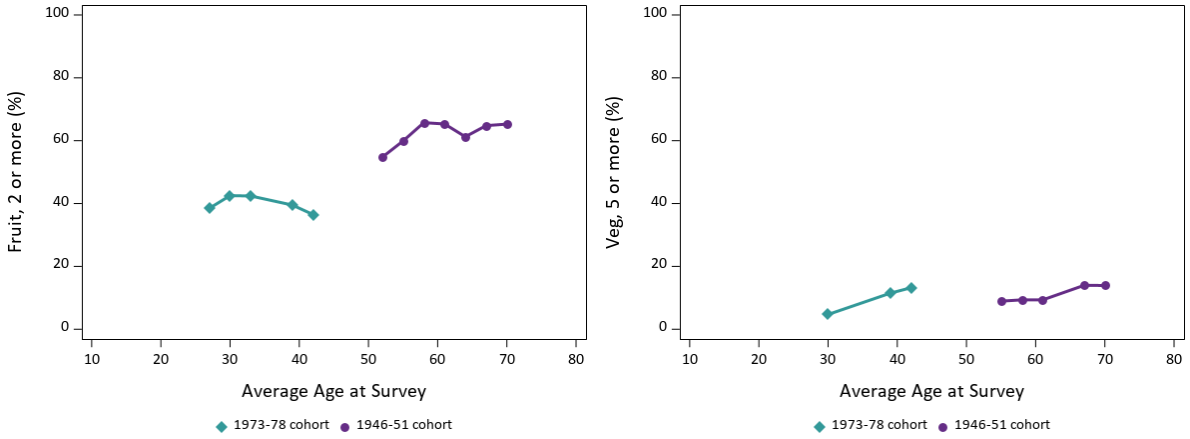

Figure 4-2: Percentage of women meeting the Australian Dietary Guidelines for fruit and vegetable consumption, by age for each cohort.

Only around 10% of ALSWH participants met the guidelines for vegetable consumption, but this has improved slightly over time (right panel of Figure 4-2). Adherence to guidelines was higher for fruit, with about 40% of the 1973-78 cohort and more than 60% of the 1946-51 cohort adhering to the recommendations. These percentages are similar to those found in other studies (Charlton et al., 2014; Opie et al., 2020) of dietary intake by Australian women.

4.2.3 Physical activity and sedentary behaviour (including sleep)

The percentages of the 1973-78 and 1946-51 cohorts who meet physical activity guidelines are shown in Figure 4.3 (see also section 3.4.5).

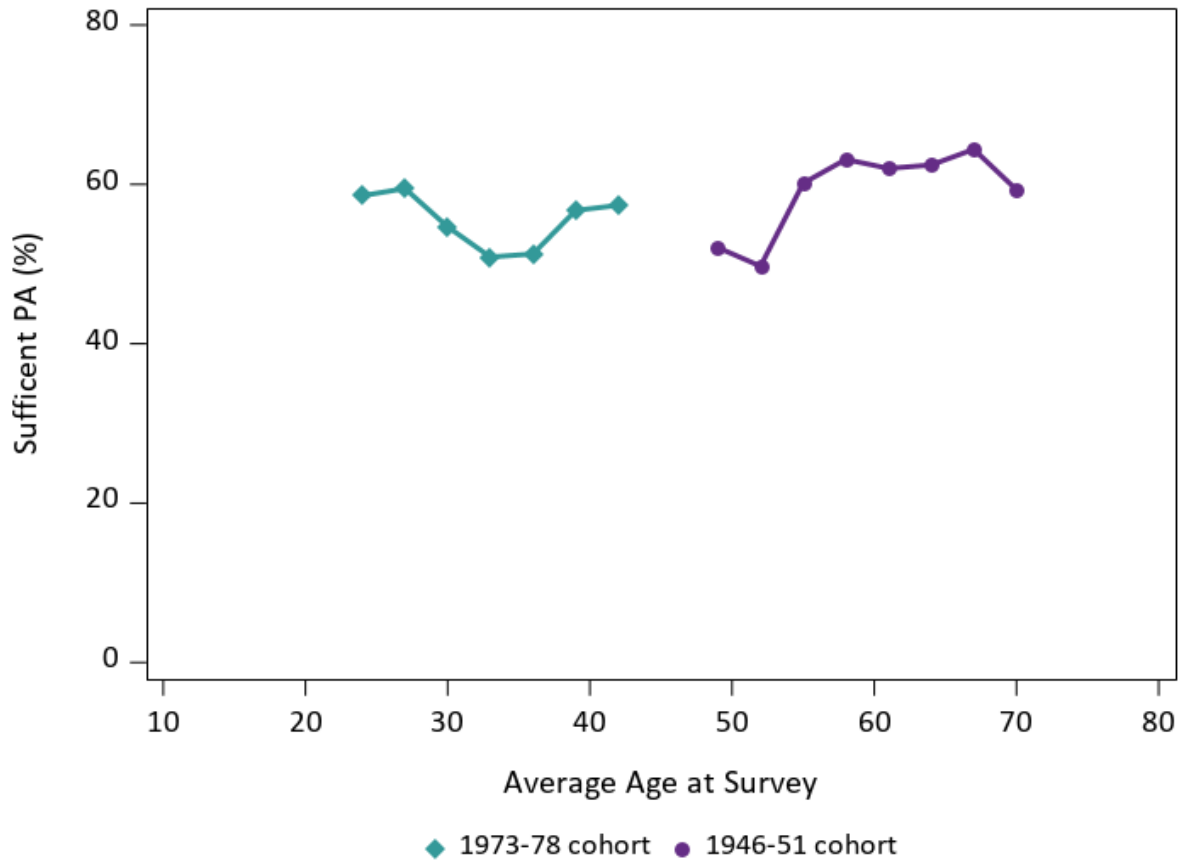

Figure 4-3: Percentage of women meeting the Australian guidelines for physical activity, by age for each cohort.

About 60% of ALSWH participants in these two cohorts undertake the recommended amount of physical activity (Figure 4-3). Notably, women in the 1973-78 cohort had the poorest adherence to guidelines during their 30s, likely reflecting when they had young children. In contrast, adherence was higher in the 1946-51 cohort when the women reached retirement age. The prevalence of those meeting the guidelines remained high from their mid-50s until the women approached their 70s, signalling an opportunity to intervene and help women remain active in later life. Continuing to engage in physical activity is likely to be important for women to extend their disability free life expectancy through their later years (Rahman & Jagger, Manuscript under review).

In addition to specifying levels of physical activity sufficient for health benefit, the Australian guidelines also recommend limiting time spent sitting. Time spent sitting for six hours or less per day (Figure 4-4) showed a similar pattern to the physical activity

levels. Women in the 1946-51 cohort spent less time sitting than women in the 1973-78 cohort. Women in the 1973-78 cohort were more likely to meet the recommendations when they were in their 30s with a later decline possibly due to work-related sitting. For both cohorts these data provide insights into possible key life stages for reducing sitting and the consequent health effects.

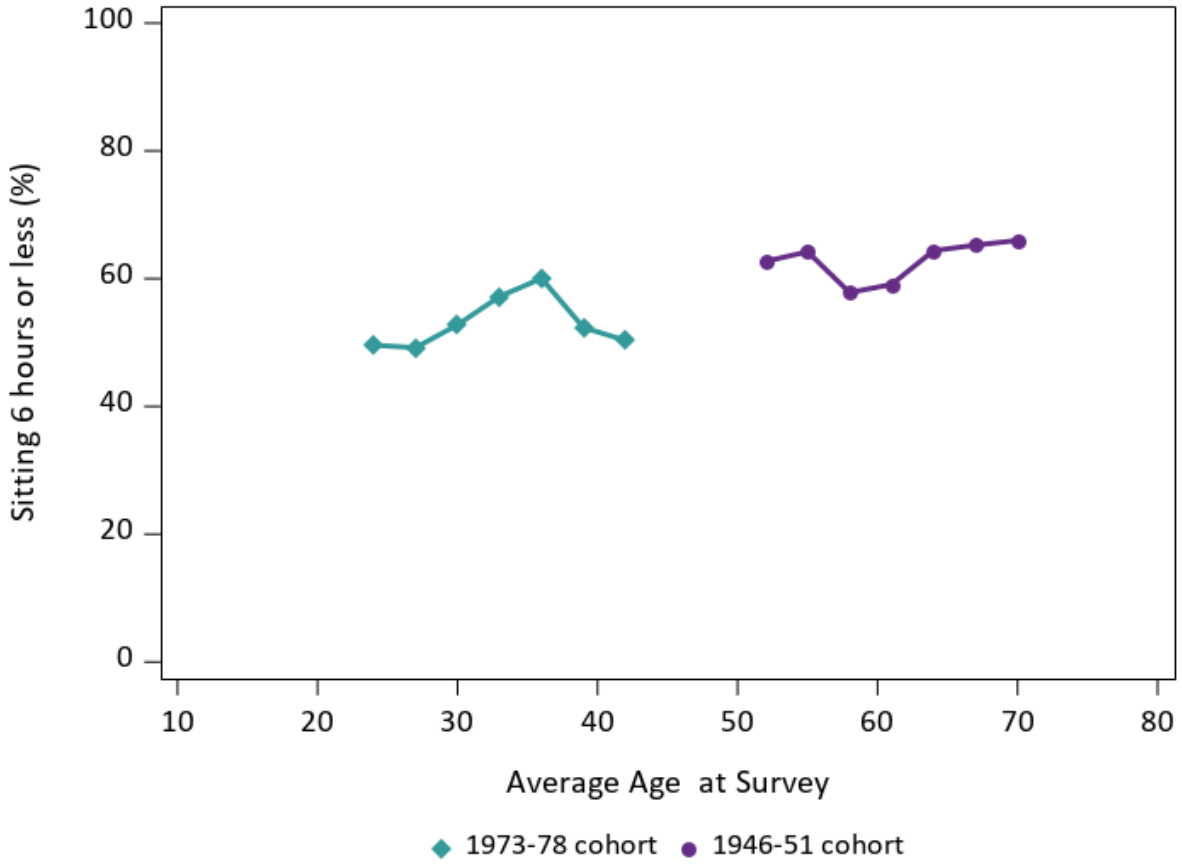

Figure 4-4: Percentage of women adhering to guidelines for sitting, by age for each cohort.

4.2.4 Difficulty sleeping

Difficulty sleeping increased markedly with age in both cohorts (Figure 4-5). Poor quality of sleep impacts our performance and safety when awake and is also implicated in a range of long-term physical and mental health outcomes, including reduced quality of life and poor mental health. In the 1973-78 cohort, up until their 30s the prevalence of those with self-reported sleep difficulties remained constant at around 10%, with women who reported difficulty sleeping on one survey being very likely to report difficulties again on the next survey (Jackson, Sztendur, Diamond,

Byles, & Bruck, 2015). The rising prevalence of difficulty sleeping increased among this cohort as the women moved through to their 40s is potentially coincident with other changes in the women's lives including childbirth (Lauche et al., 2016), increasing weight, and the onset of some chronic conditions. Sleeping problems also increase during perimenopause (Brown, Mishra, & Dobson, 2002). Depression and anxiety, alcohol, and abuse (Bruck & Astbury, 2012) are also factors that increase the likelihood of difficulty sleeping among women in early and midlife.

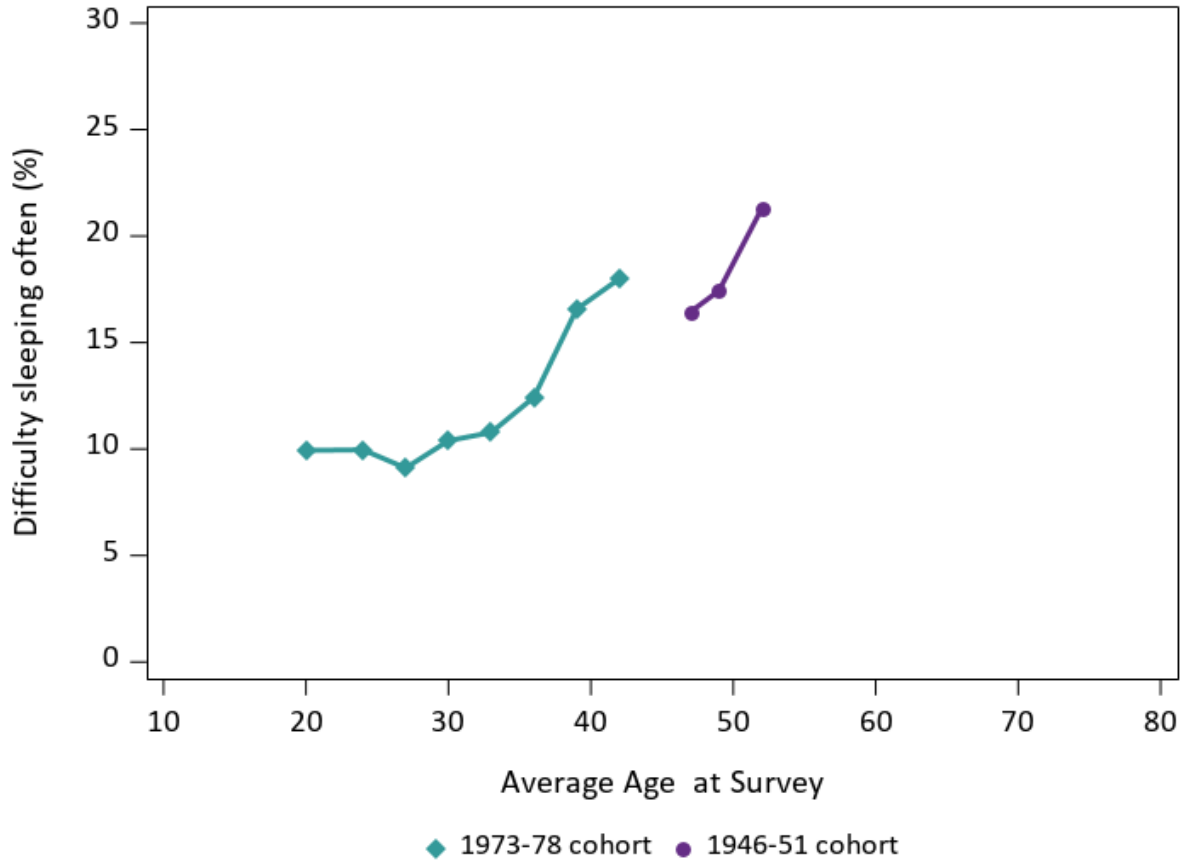

Figure 4-5: Percentage of women who report often having difficulty sleeping, by age for each cohort.

4.2.5 Smoking

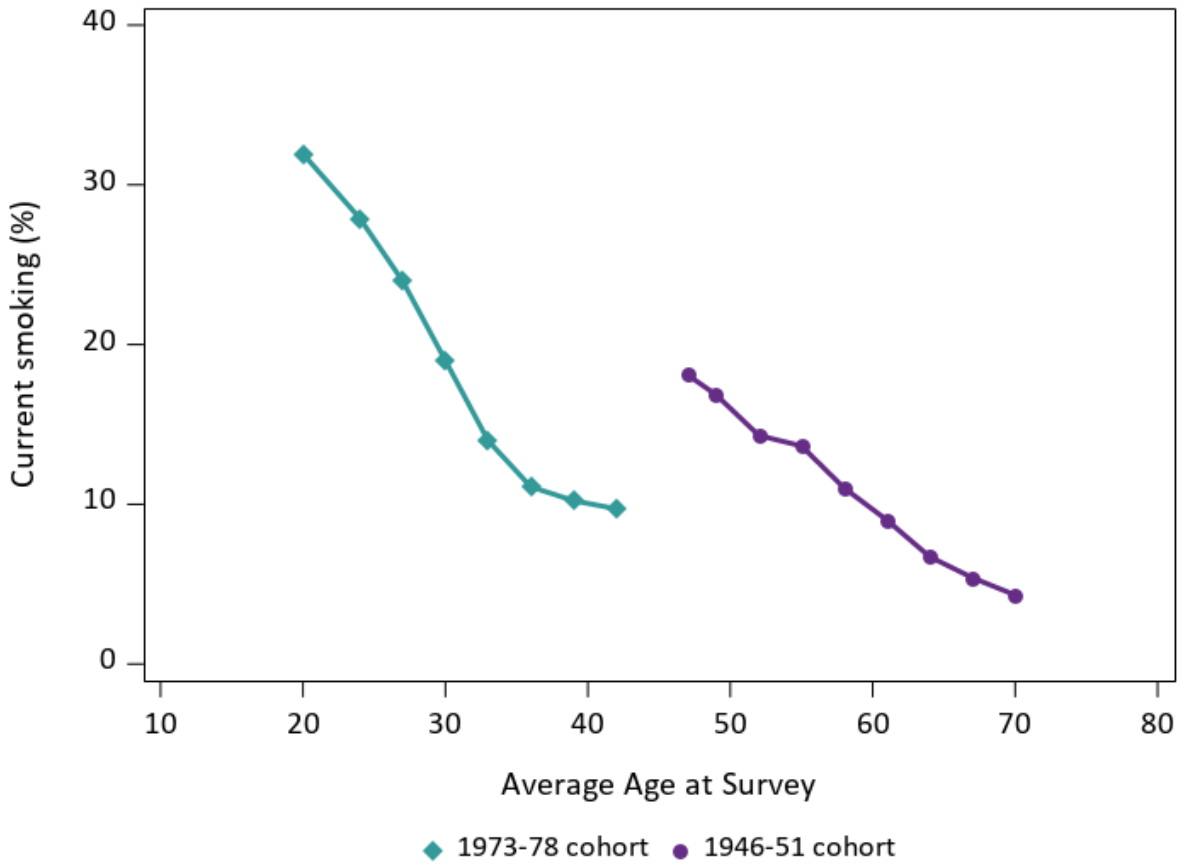

Figure 4-6: Percentage of women who were current smokers, by age for each cohort.

Cigarette smoking has declined steadily in Australia over the last 20 years or more following numerous measures to discourage people from ever smoking and to encourage smokers to quit. The results are shown clearly in Figure 4-6. While more than 30% of women in the 1973-78 cohort were smokers when they were aged 18-23 in 1996, only 10% remained smokers by the time they reached 40 years of age though the rate of decline appears to be slowing. In contrast, almost 20% of women in the 1946-51 cohort were smokers when they were aged 45-50 in 1996, but they too have given up smoking with less than 5% reporting still being smokers by their 70s in 2019.

4.2.6 Alcohol consumption

The revised Australian guidelines for alcohol consumption, released in 2020, recommend that adults should drink no more than 10 standard drinks a week and no more than four standard drinks on any one day (and that pregnant women and those

who are breastfeeding should not drink alcohol). Previous versions of the guidelines (in 2001 and 2009) have suggested no more than 14 standard drinks per week, with varying definitions for binge drinking. Following the method adopted by the Australian Institute of Health and Welfare (AIHW) for reporting drinking behaviour in relation to the 2020 guidelines, consumption of more than 10 standard drinks in a week or more than four standard drinks on any one day are defined as being at 'levels that increase the risk of alcohol-related disease or injury'. Figure 4-7 shows the percentages of women who drink below this level (within guidelines).

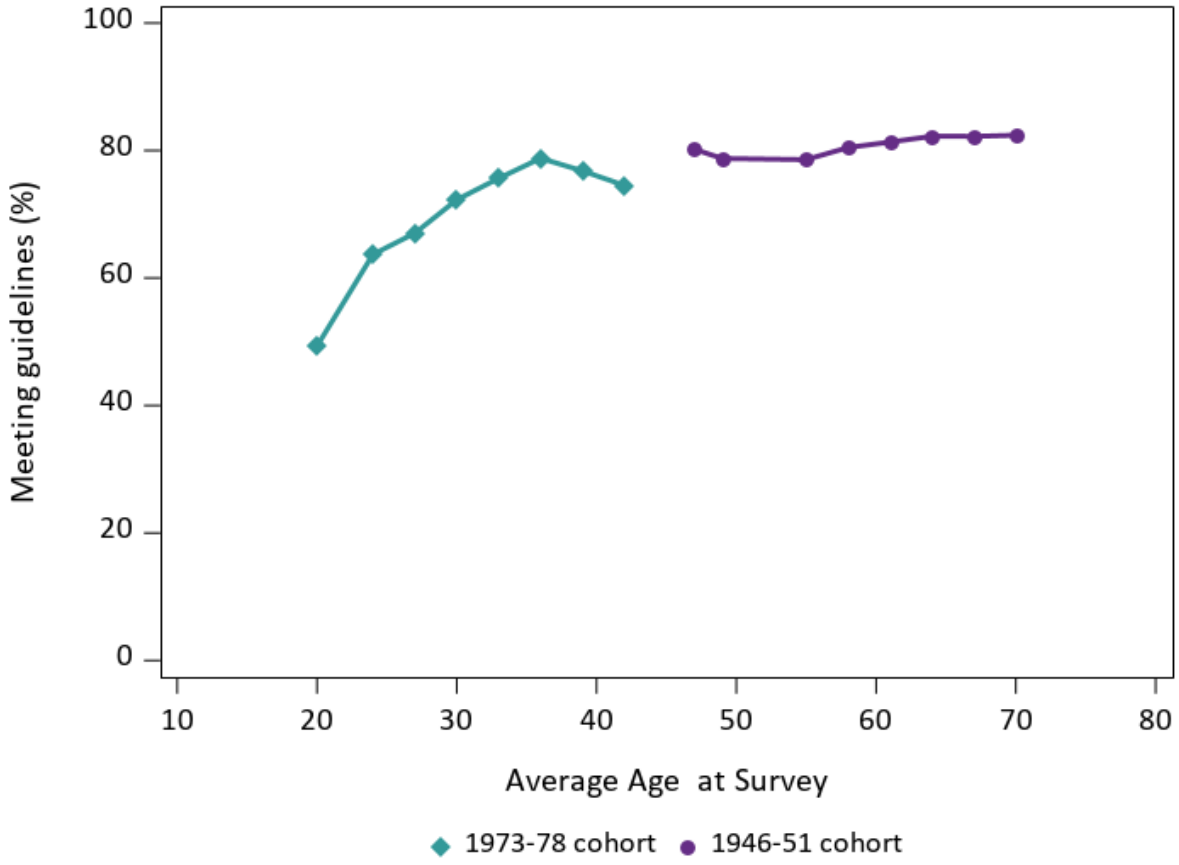

Figure 4-7: Percentage of women whose alcohol consumption is below 'levels that increase risk of alcohol-related disease or injury', by age for each cohort.

Most ALSWH participants in these two cohorts meet the current Australian guidelines for alcohol consumption (and also the earlier versions of the guidelines). The percentage of women in the 1973-78 cohort meeting the guidelines increased from about 50% when they were aged 18-23 to nearly 80% when they reached their 40s.

This is approaching the 80% adherence exhibited by the 1946-51 cohort throughout the study period so far.

4.2.7 Difficulty managing on available income

Another factor that is strongly related to health and use of health services is socio-economic position and access to financial resources.

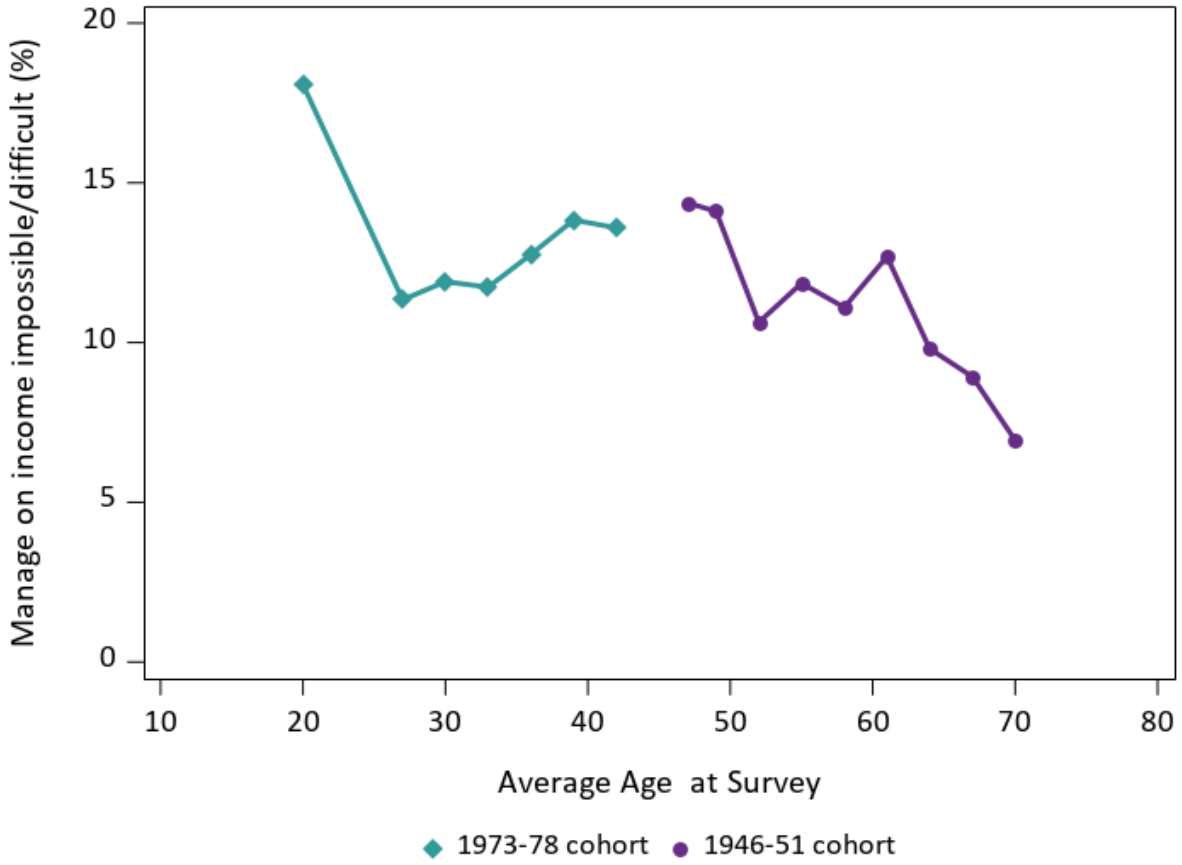

Figure 4-8: Percentage of women reporting they had difficulty all of the time or found it impossible to manage on the income they have available, by age for each cohort.

Figure 4-8 shows that few ALSWH participants reported difficulty managing on their available income, except for the 1973-78 cohort when they were aged 18-23. In particular, the percentage of women in the 1946-51 cohort reporting difficulty managing on their income declined through their 60s and 70s when they would have been eligible for greater levels of welfare support.

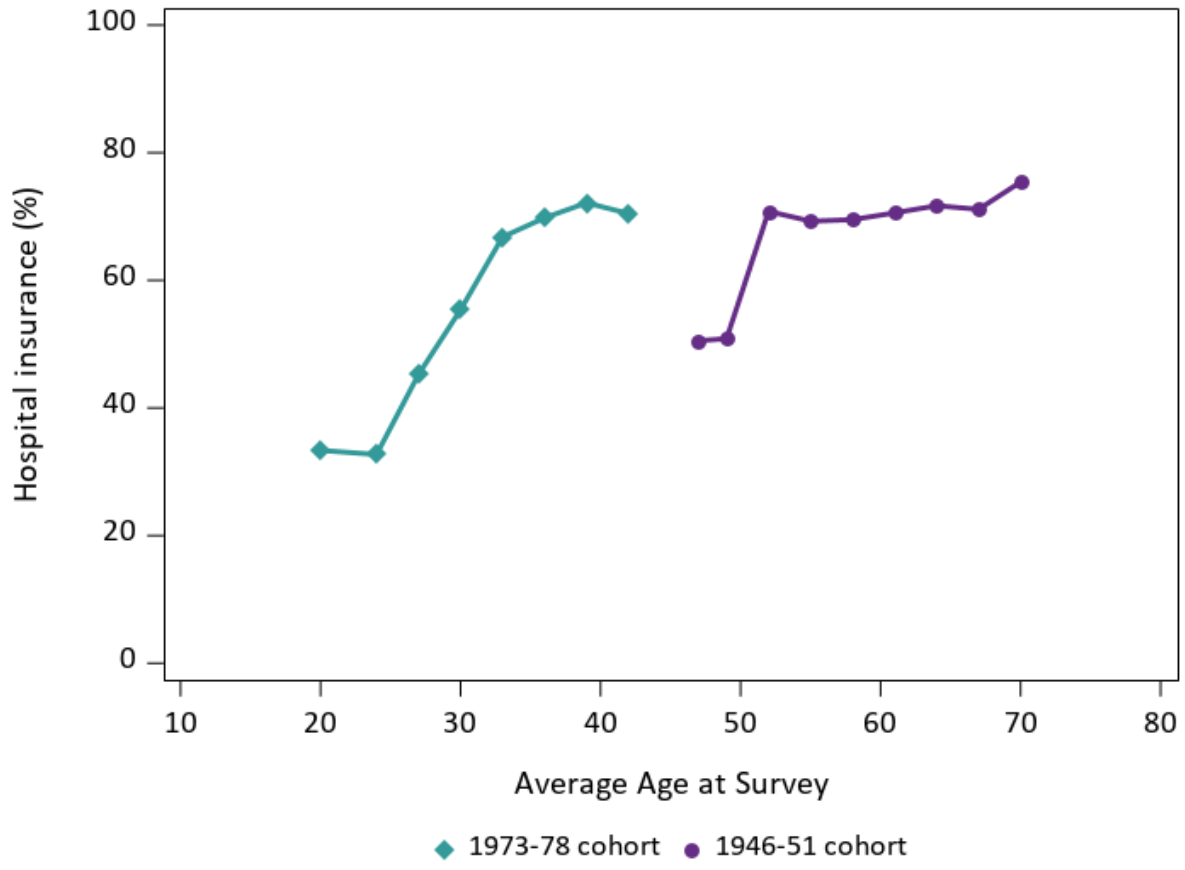

Figure 4-9: Percentage of women who had hospital insurance, by age for each cohort.

Another aspect of having financial resources to access health care is having insurance to cover hospitalisation. Figure 4-9 shows how this increased substantially between the second and third surveys for both cohorts due to changes in legislation to encourage private insurance for health cover. The result was a steady increase up to about 70% over the next 15 years for the 1973-78 cohort and an immediate increase to that level for the 1946-51 cohort.

4.3 Health conditions

This section describes the trajectories of mental and physical health among women in the 1973-78 and 1946-51 cohorts over time.

4.3.1 Self-Rated Health

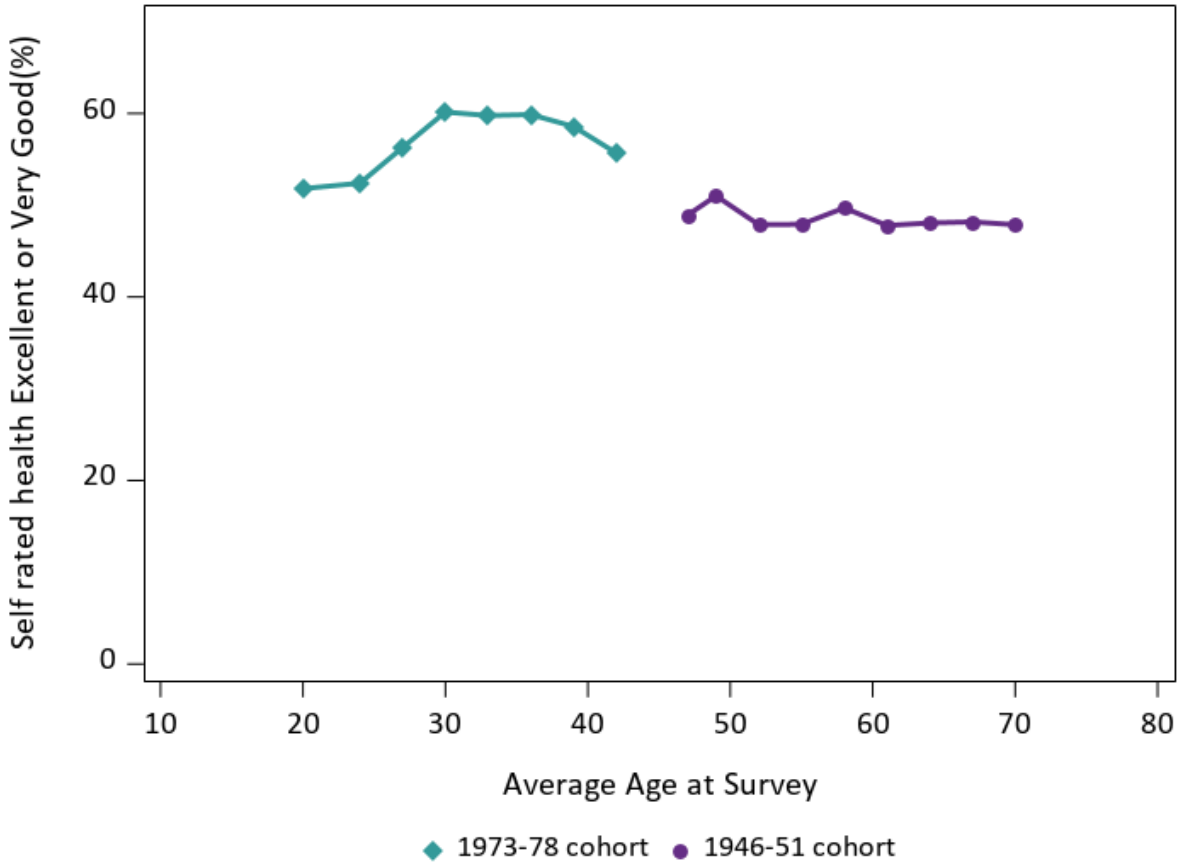

Figure 4-10: Percentage of women who rate their health as excellent or very good, by age for each cohort.

At each survey, women were asked about their general health with response options of excellent, very good, good, fair, or poor. This single question provides an insight into women's perceptions of their own health according to their own definition and value of health. It is subjective, comprehensive, and also strongly associated with more objective measures of health. Figure 4-10 shows that excellent or very good self-rated health seem to follow a continuous pattern across the cohorts being highest for women in their early 30s, decreasing to their mid-50s and then levelling off. The

following figures on mental and physical health provide insight into reasons for this overall assessment of health.

4.3.2 Dimensions of health measured by SF-36

Eight dimensions of health status are measured at every survey using the self-reported SF-36 (Ware & Sherbourne, 1992) health-related quality of life questionnaire. The dimensions are: vitality, physical functioning, bodily pain, general health perceptions, physical role functioning, emotional role functioning, social role functioning, and mental health. Each dimension is reported on a 0-100 scale with lower values indicating more disability.

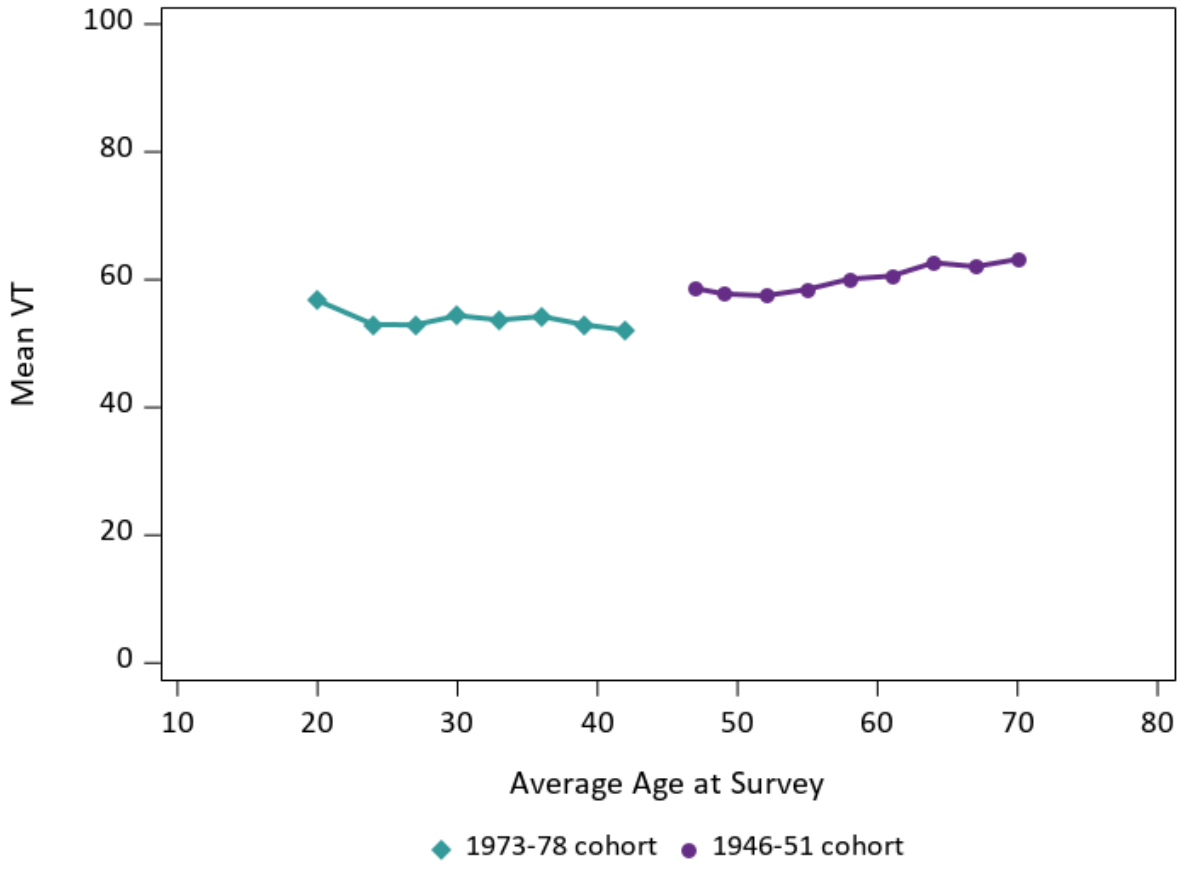

Figure 4-11: Mean vitality scores by age for each cohort.

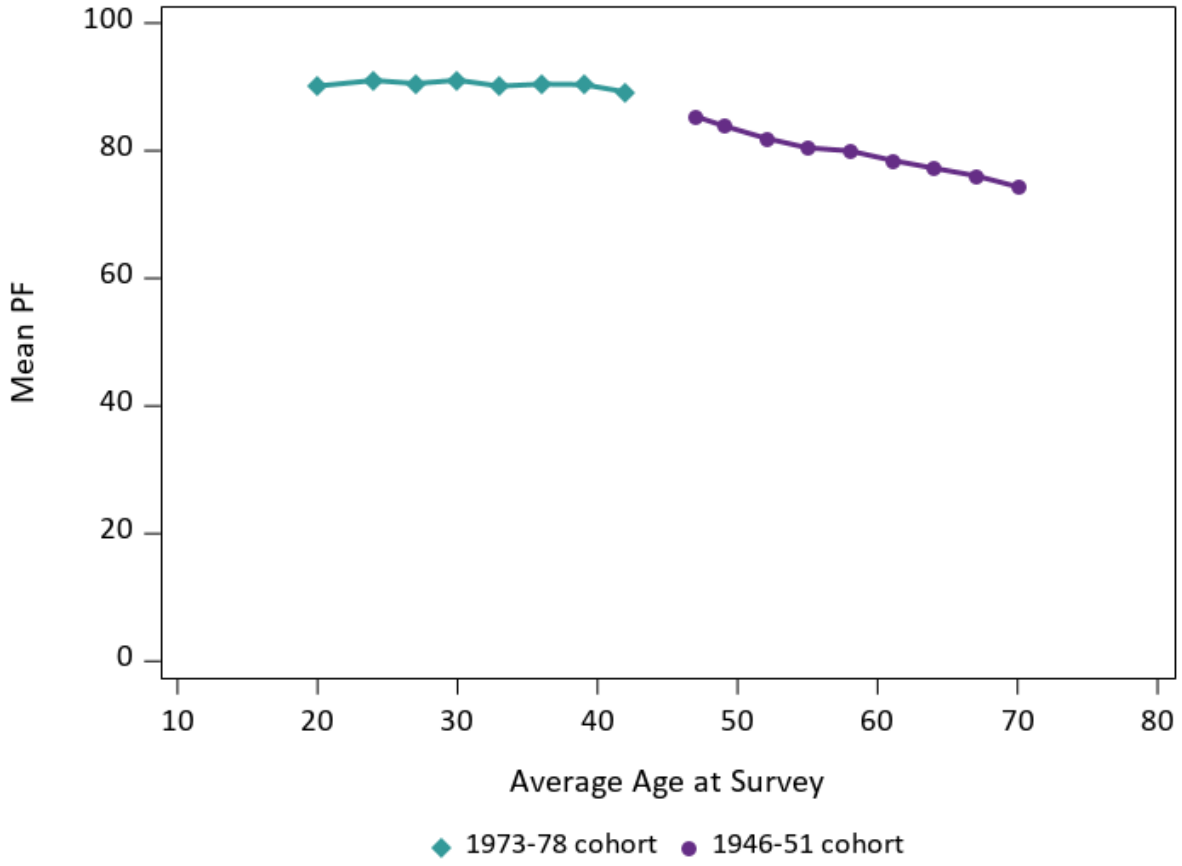

Figure 4-12: Mean physical function scores by age for each cohort.

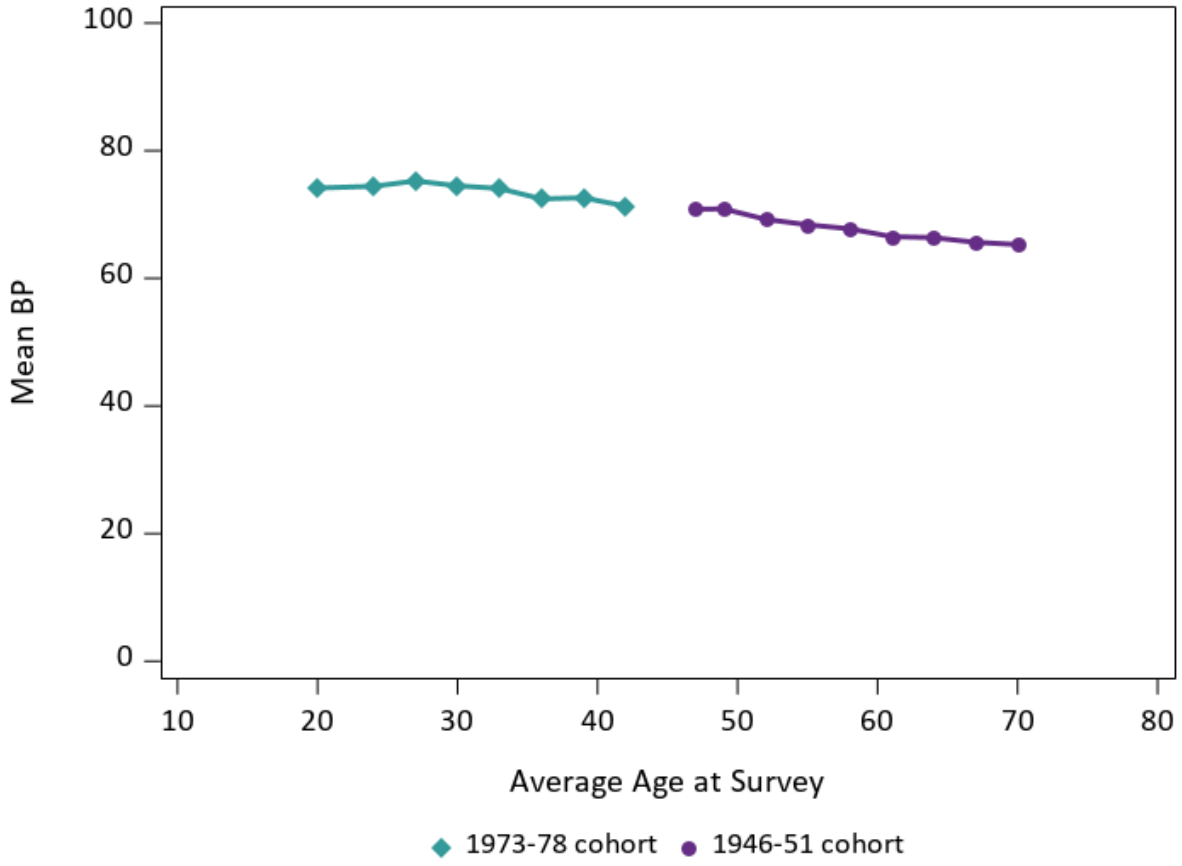

Figure 4-13: Mean bodily pain scores by age for each cohort.

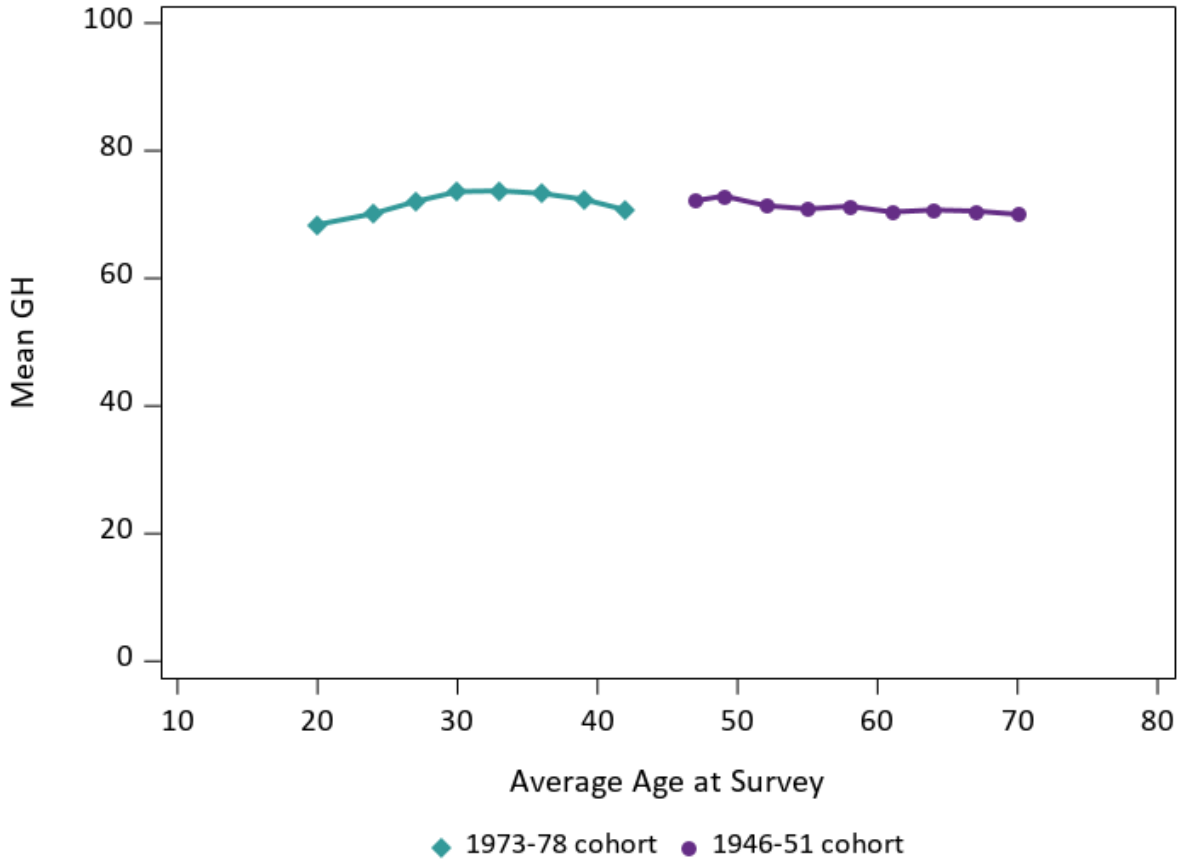

Figure 4-14: Mean general health scores by age for each cohort.

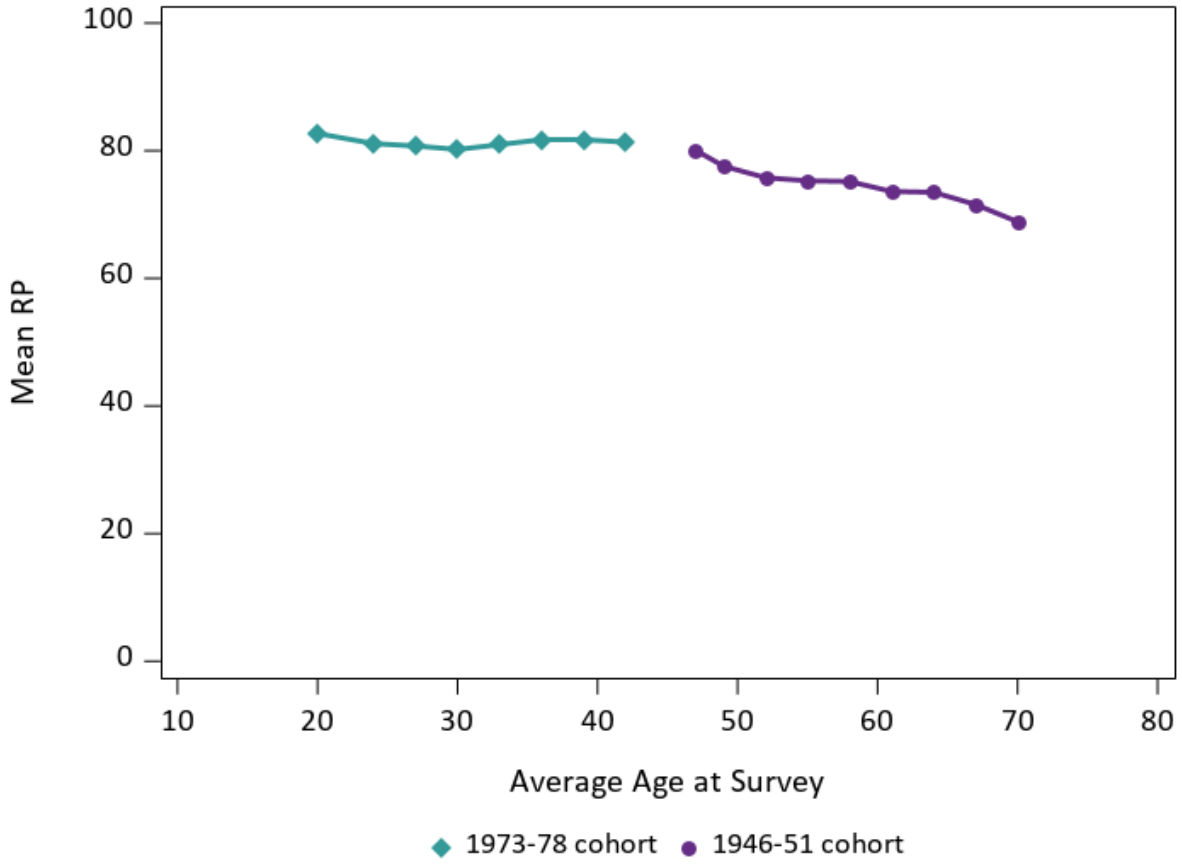

Figure 4-15: Mean physical role functioning scores by age for each cohort.

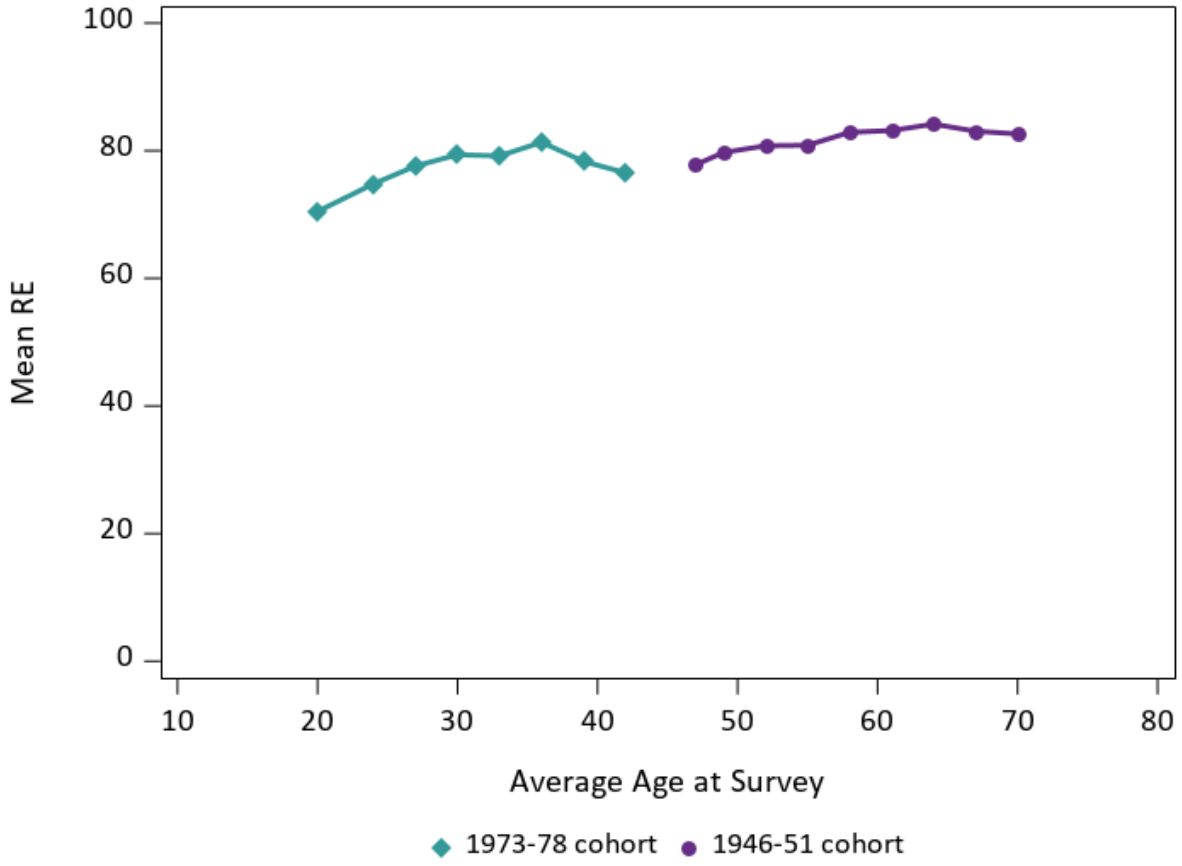

Figure 4-16: Mean emotional role functioning scores by age for each cohort.

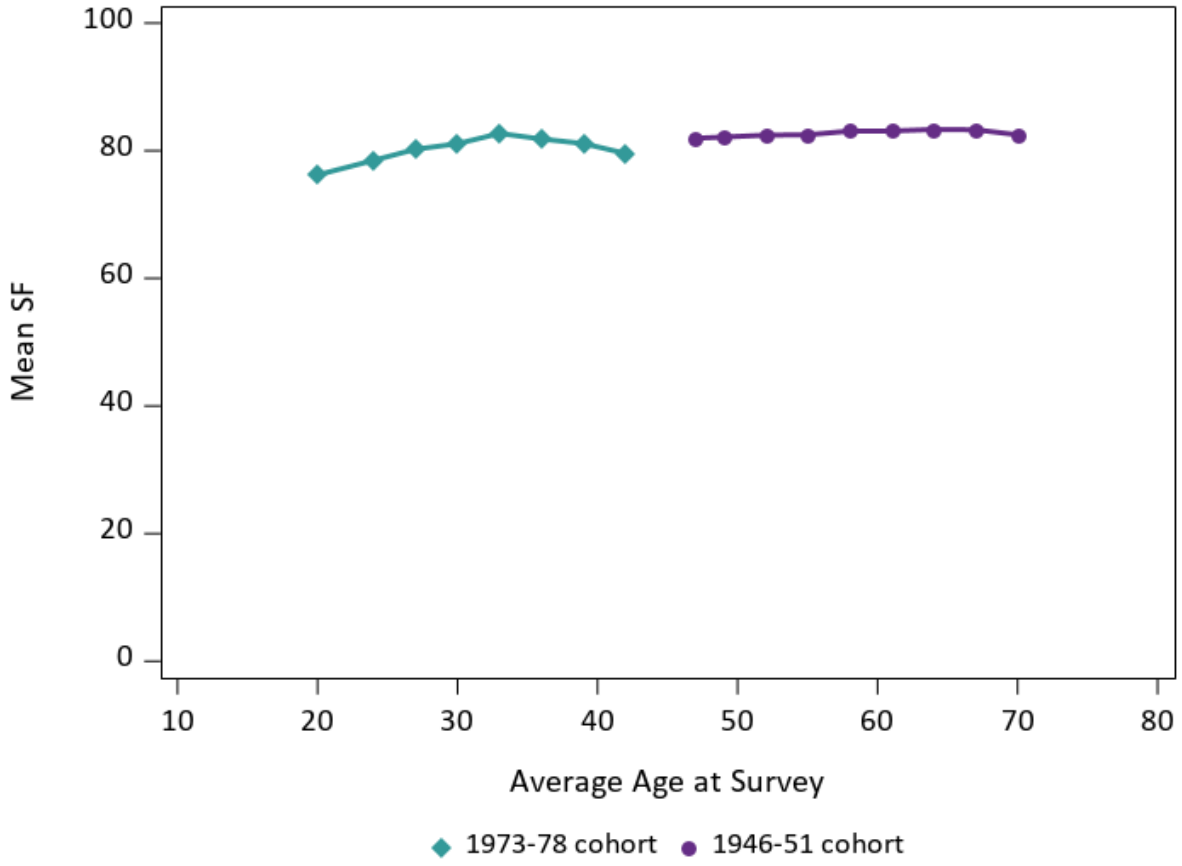

Figure 4-17: Mean social functioning scores by age for each cohort.

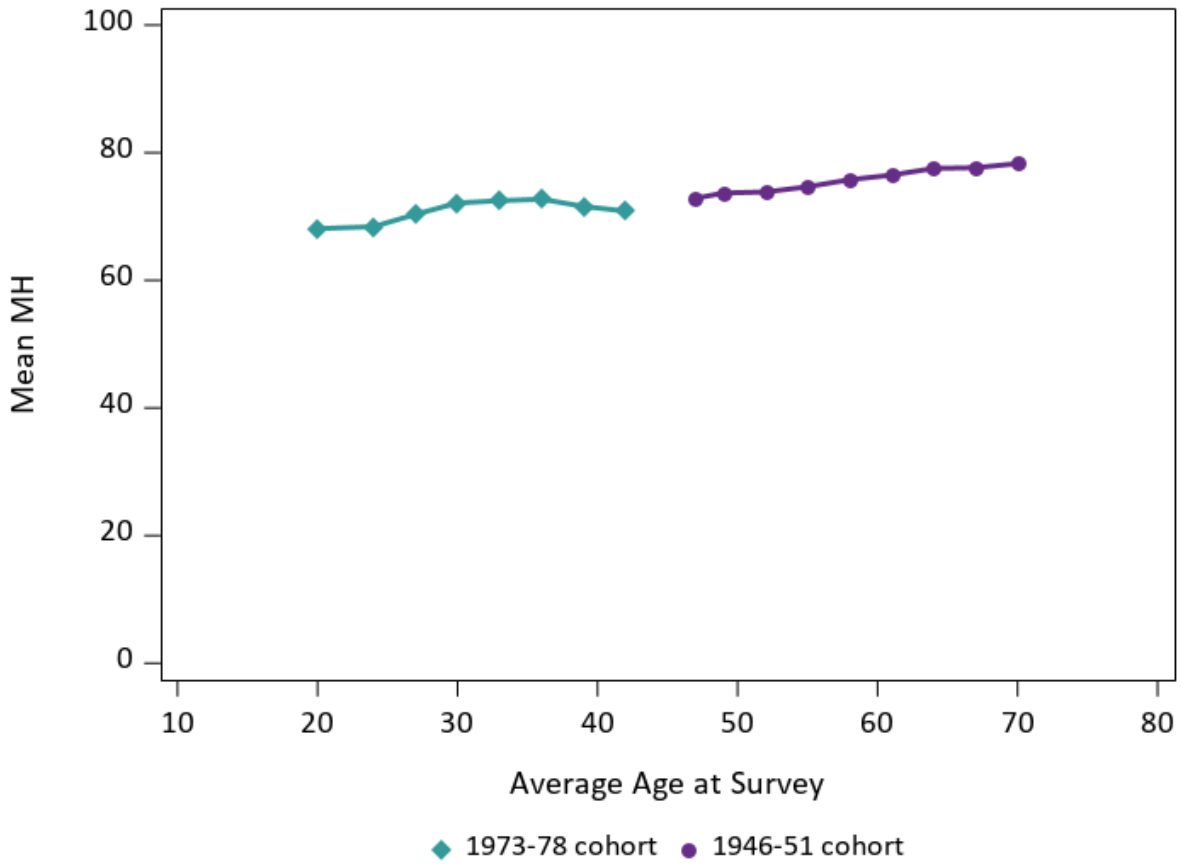

Figure 4-18: Mean mental health scores by age for each cohort.

The common patterns across the SF-36 dimensions are that those relating to physical health (physical function, bodily pain and physical role functioning) decrease with age whereas those relating to mental health and wellbeing (vitality, emotional and social functioning and mental health) all increase with age, while general health perceptions remained relatively stable, on average, over the age range of these two cohorts. On the whole, the scores are well aligned or consistent across the two cohorts when comparing the 1973-78 cohort in their early 40s and the 1946-51 cohort in their mid-late 40s. The one exception is the vitality scale where the 1973-78 cohort have lower scores in their early 40s than the 1946-51 cohort had in their late 40s.

Other measures of mental health are included in most ALSWH surveys. These include questions about women being told by a doctor that they have anxiety or depression and the use of multi-item scales that provide scores that relate to diagnoses. The following three figures are all based on scales.

4.3.3 Anxiety

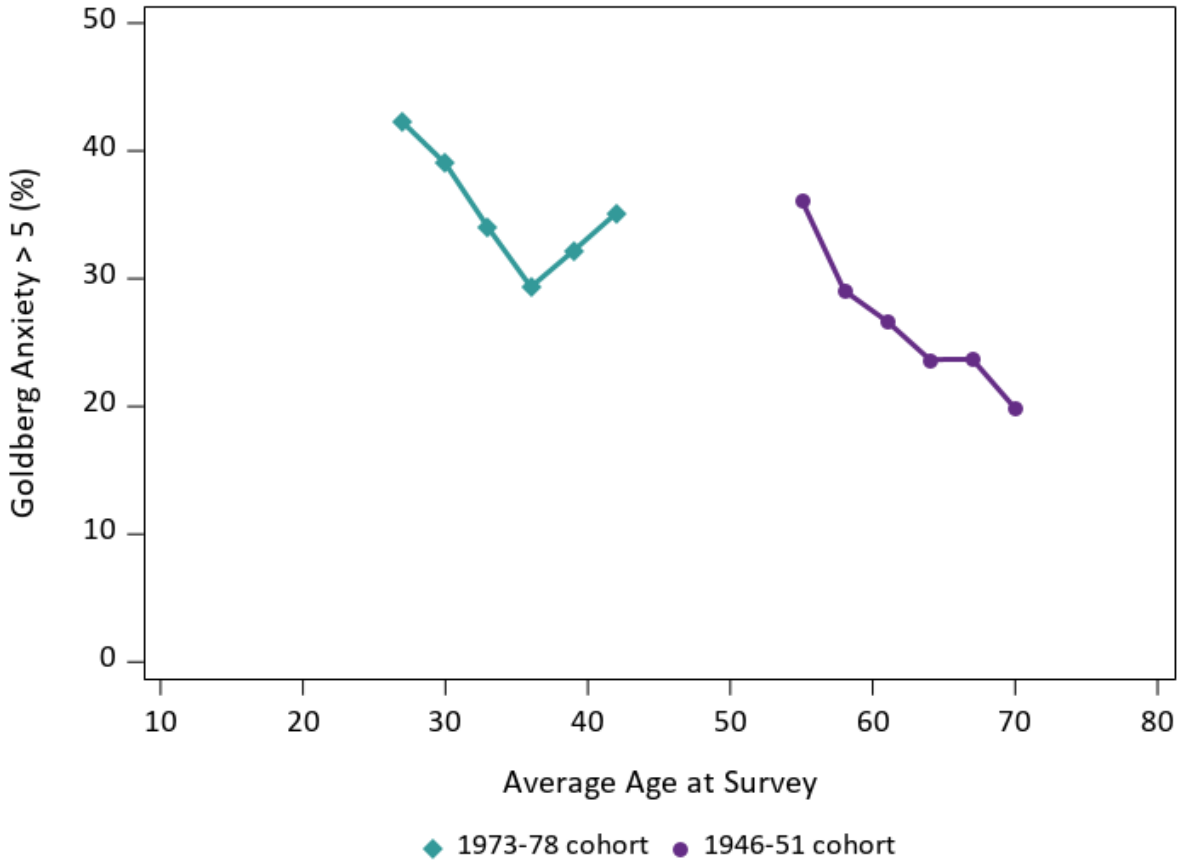

Figure 4-19: Percentage of women with scores greater than 5 on the Goldberg anxiety scale, by age for each cohort.

A commonly used scale for anxiety is the Goldberg scale (Goldberg, Bridges, Duncan-Jones, & Grayson, 1988). Using a cut-point of >5 to indicate symptoms of anxiety, Figure 4-19 shows the prevalence initially declining with age for the 1973-78 cohort but increasing over the last two surveys. In contrast, the prevalence of symptoms of anxiety decreased steadily with age for the 1946-51 cohort.

4.3.4 Depression

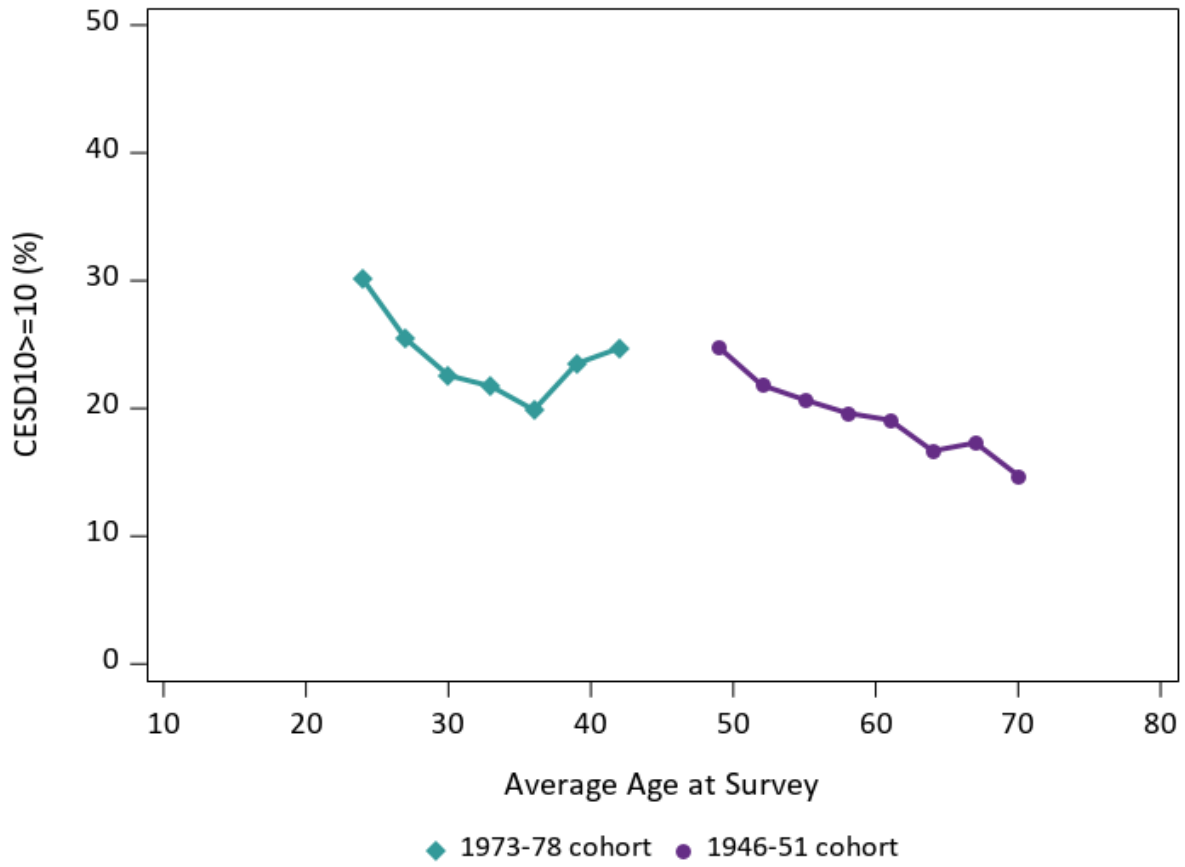

Figure 4-20: Percentage of women with scores greater than or equal to 10 on the Centers for Epidemiological Studies Depression (CESD-10) 10-item scale, by age for each cohort.

Figure 4-20 shows the prevalence of symptoms of depression measured using the Centers for Epidemiological Studies Depression (CESD-10) 10-item scale. The pattern is the same as that for anxiety shown in Figure 4-19 and is also consistent with changes in the mental health and wellbeing items from SF-36 (Figures 4-11, 4-16, 4-17 and 4-18).

4.3.5 Stress

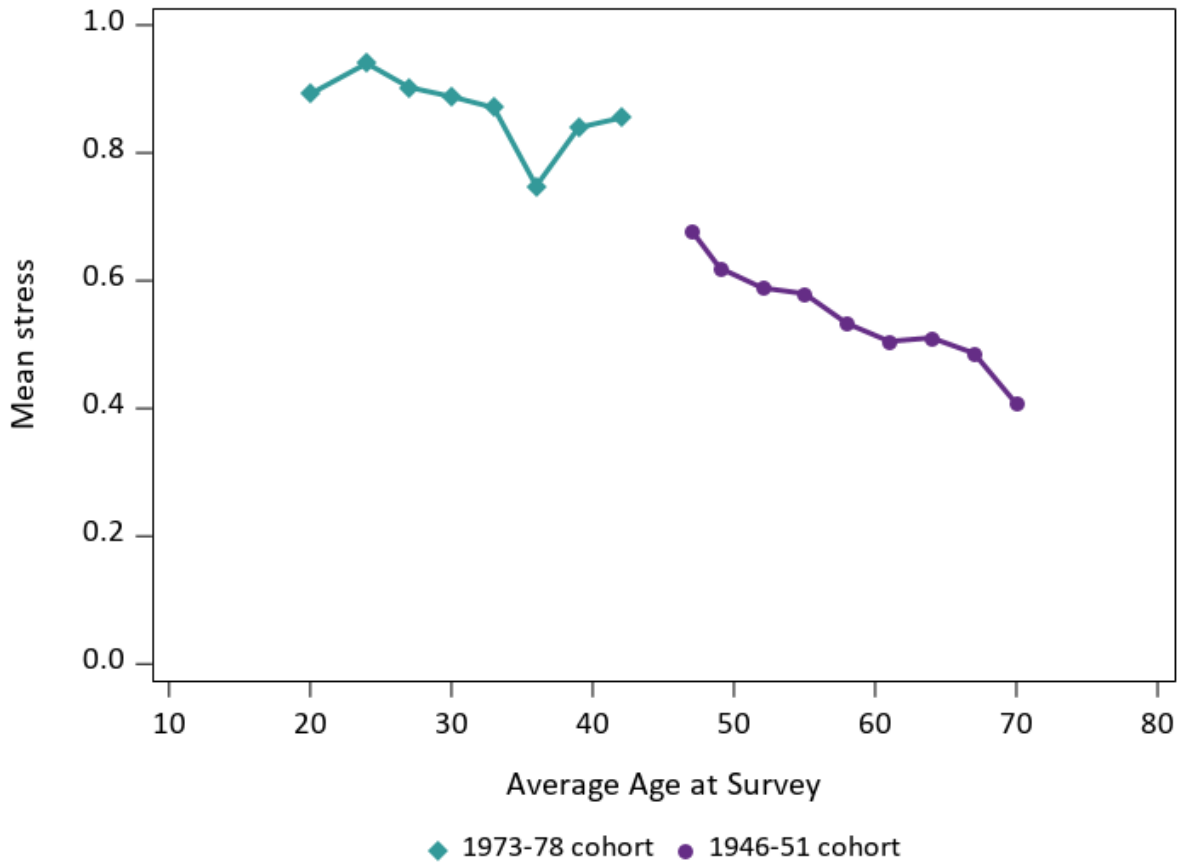

Figure 4-21: Mean scores for stress, by age for each cohort.

In each survey women are asked “Over the last 12 months, how stressed have you felt about the following areas of your life?” The items include life-stage specific areas such as health, work, study, money, relationships, each rated from ‘not at all stressed’ to ‘extremely stressed’. The scores are averaged over all items with high scores indicating greater stress. Figure 4-21 of mean scores shows a similar pattern to Figure 4-19 and Figure 4-20 for anxiety and depression respectively. The consistency of these figures supports an interpretation that poorer mental health – defined by feeling stressed, anxious and depressed – decreases with increasing age except for women in their 30’s.

4.3.6 Chronic conditions

In the 2019 report to the Department of Health, we used linked data from the ALSWH surveys and the Medical Benefit Scheme and Pharmaceutical Benefits Scheme, hospital admissions, aged care assessments and death certificates to identify women with various chronic conditions and multimorbidity. Here we show updated estimates for several common conditions, mainly based on survey data.

Arthritis

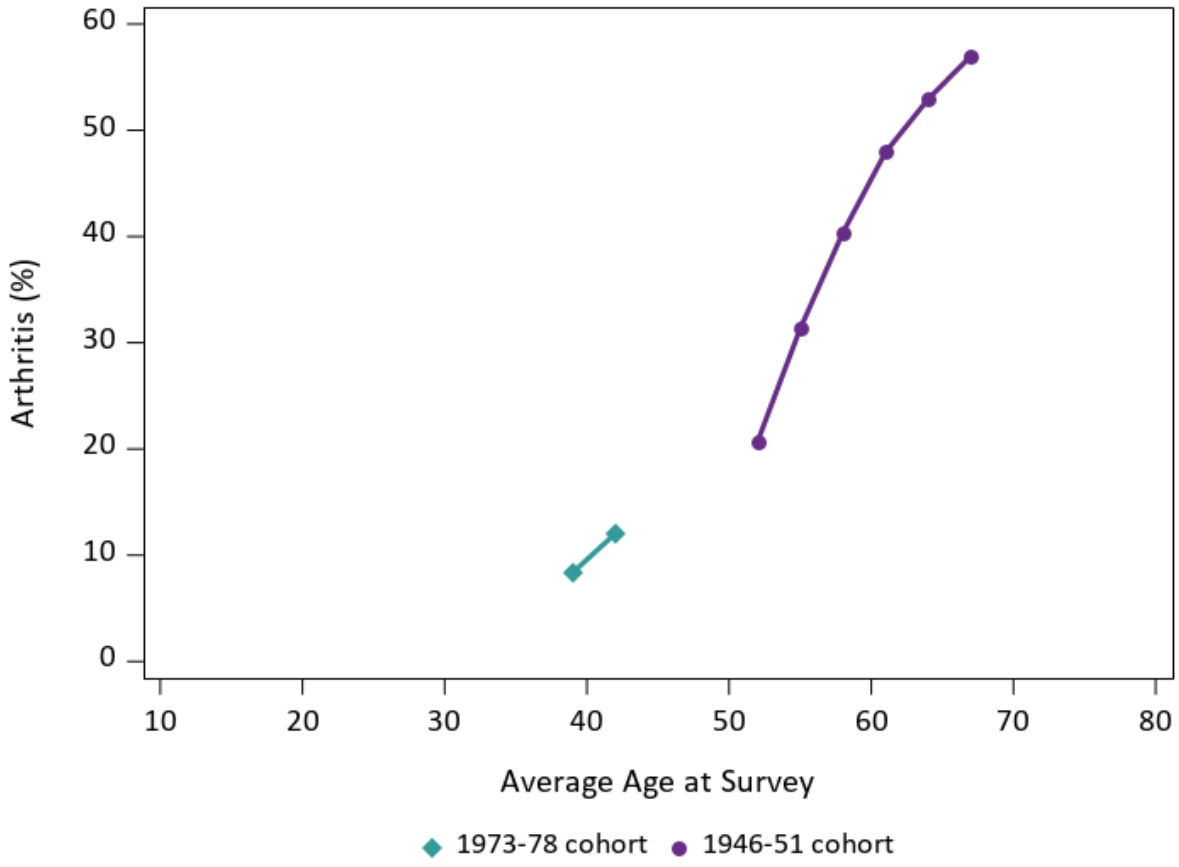

Figure 4-22: Percentage of women reporting arthritis, by age for each cohort.

The typical pattern of increasing prevalence with increasing age is shown in Figure 4-22 for the most common condition, arthritis, with this evident even from just two time points for the 1973-76 cohorts.

Cancer

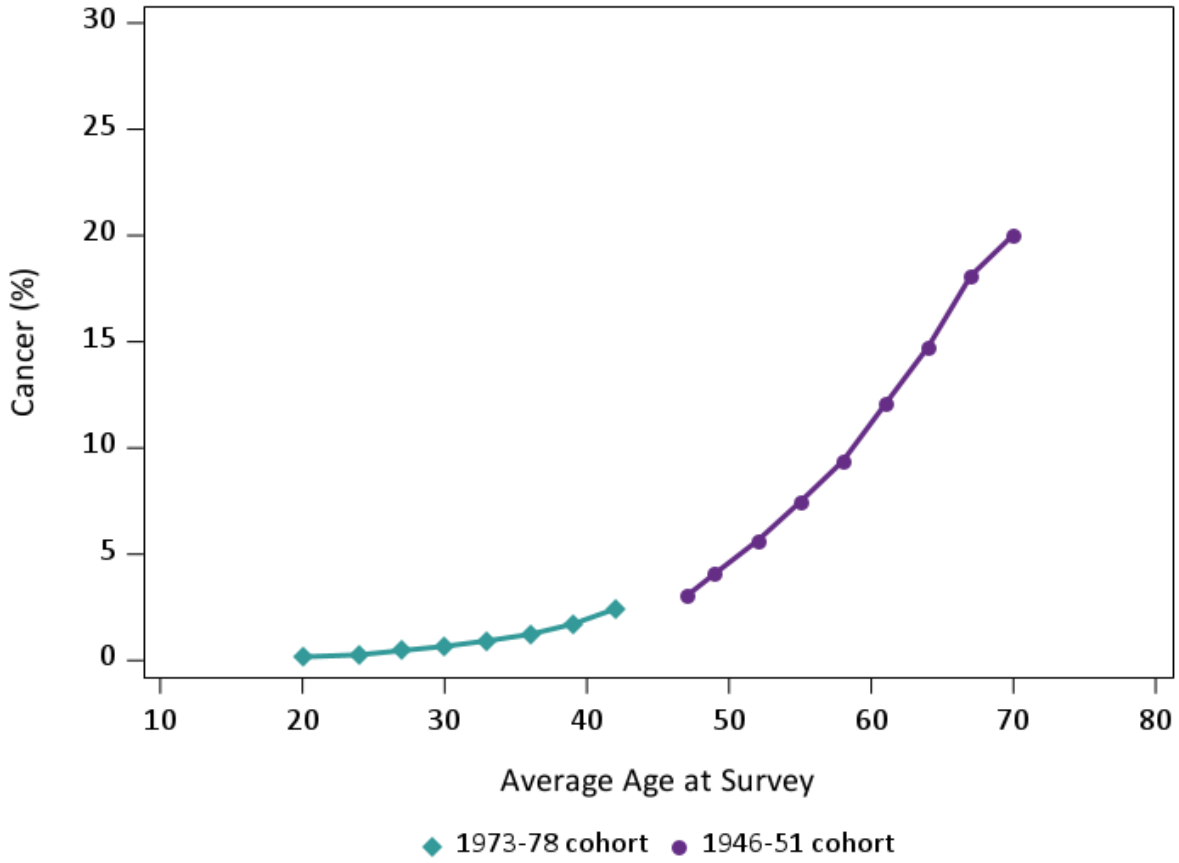

Figure 4-23: Percentage of women who ever had cancer, by age for each cohort.

Note: Cancer data is from the Australian Cancer Database, which incorporates data from all State registries.

The same pattern of increasing prevalence with age is also clear for cancers (Figure 4-23), though this needs to be monitored closely to see if the 1973-78 cohort will follow along the same path as the 1946-51 cohort or a higher trajectory.

Heart disease

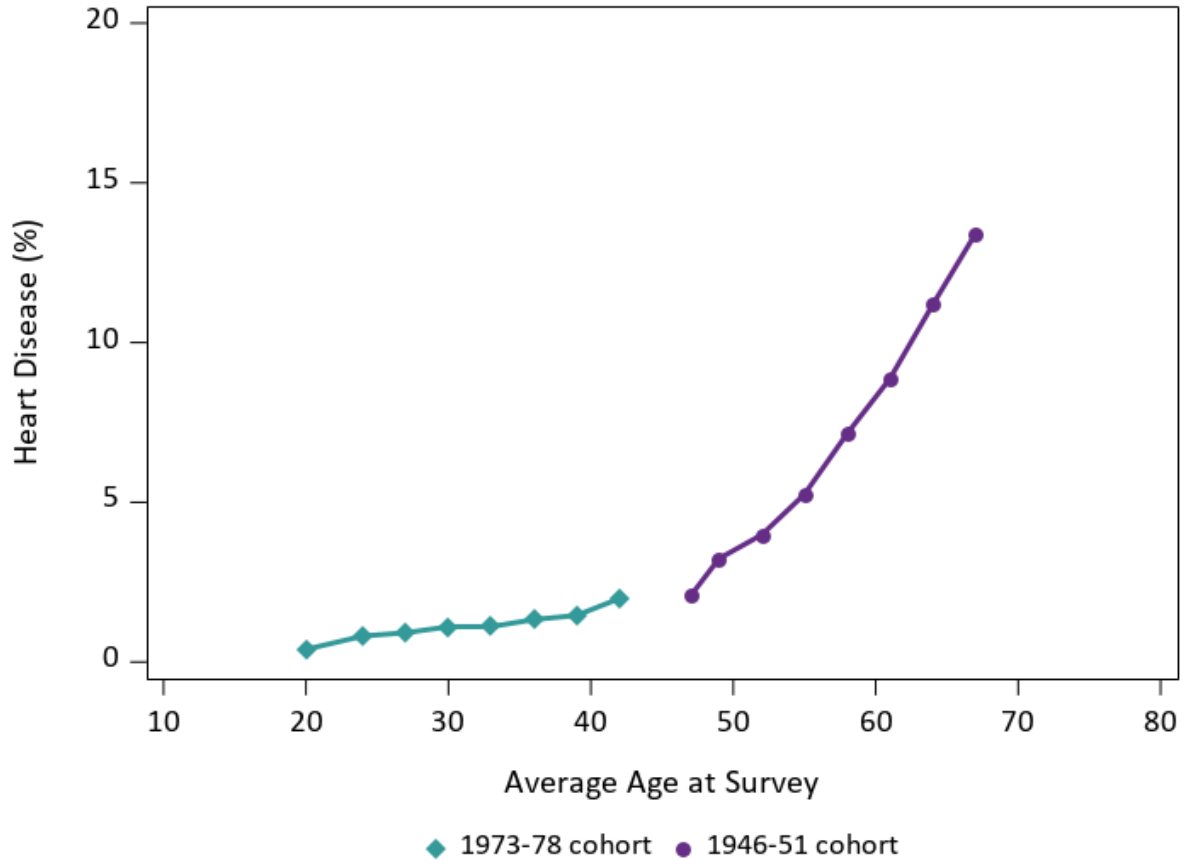

Figure 4-24: Percentage of women reporting heart disease, by age for each cohort.

Similarly, the prevalence of self-reported heart disease increases with age, with the 1973-78 cohort in their early 40s already around the same rate as the 1946-51 cohort were in their late 40s (Figure 4-24). This trend of rising prevalence at a younger age will need to be confirmed with subsequent surveys but is consistent with higher diabetes rates among this cohort (shown below) and has significant implications for health services use going forward.

Diabetes

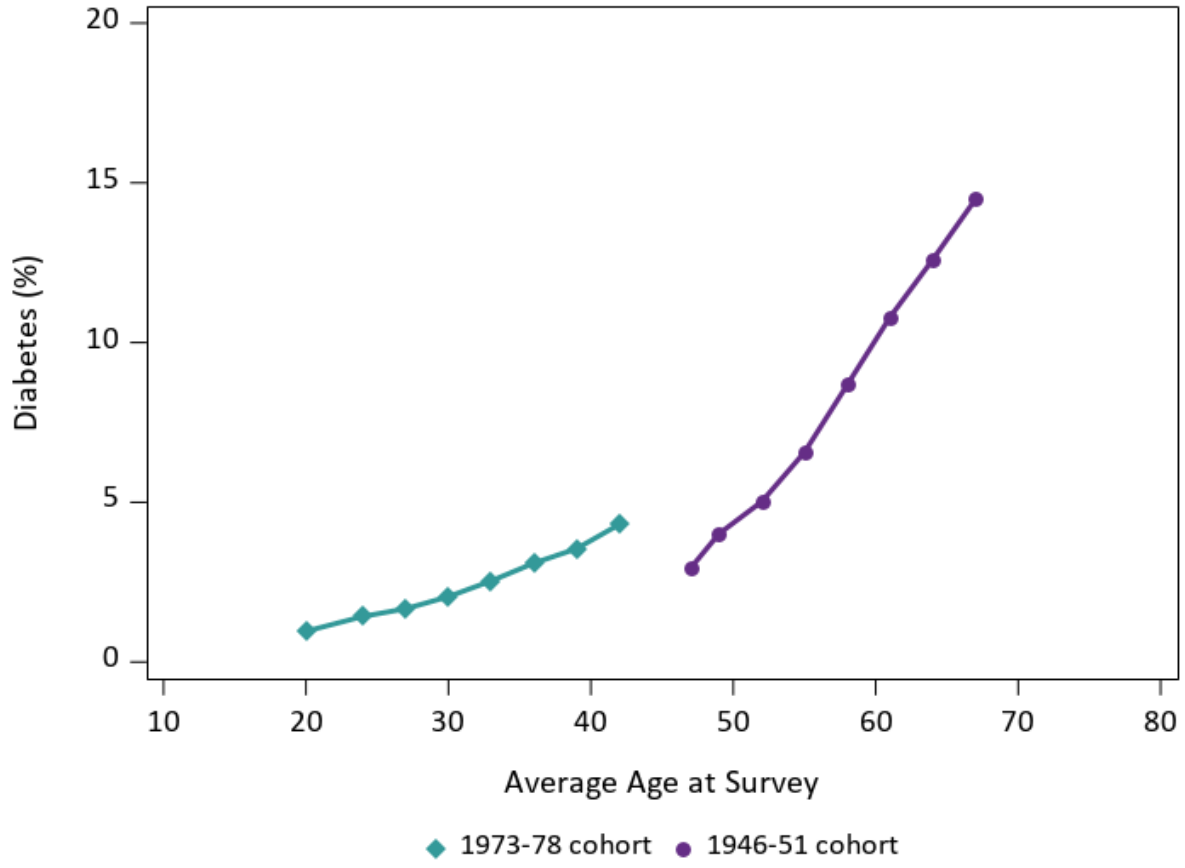

Figure 4-25: Percentage of reporting diabetes, by age for each cohort.

The prevalence of diabetes shows the same pattern of rising with age, but increasingly more rapidly for the 1973-78 cohort than for the 1946-51 cohort (Figure 4-25). Furthermore, the 1973-78 cohort has prevalence rates at age 40-45 that did not occur in 1946-51 cohort until the women were more than five years older. This is consistent with the pattern for the major risk factor for diabetes, obesity as shown in Figure 4-1.

Urinary Incontinence

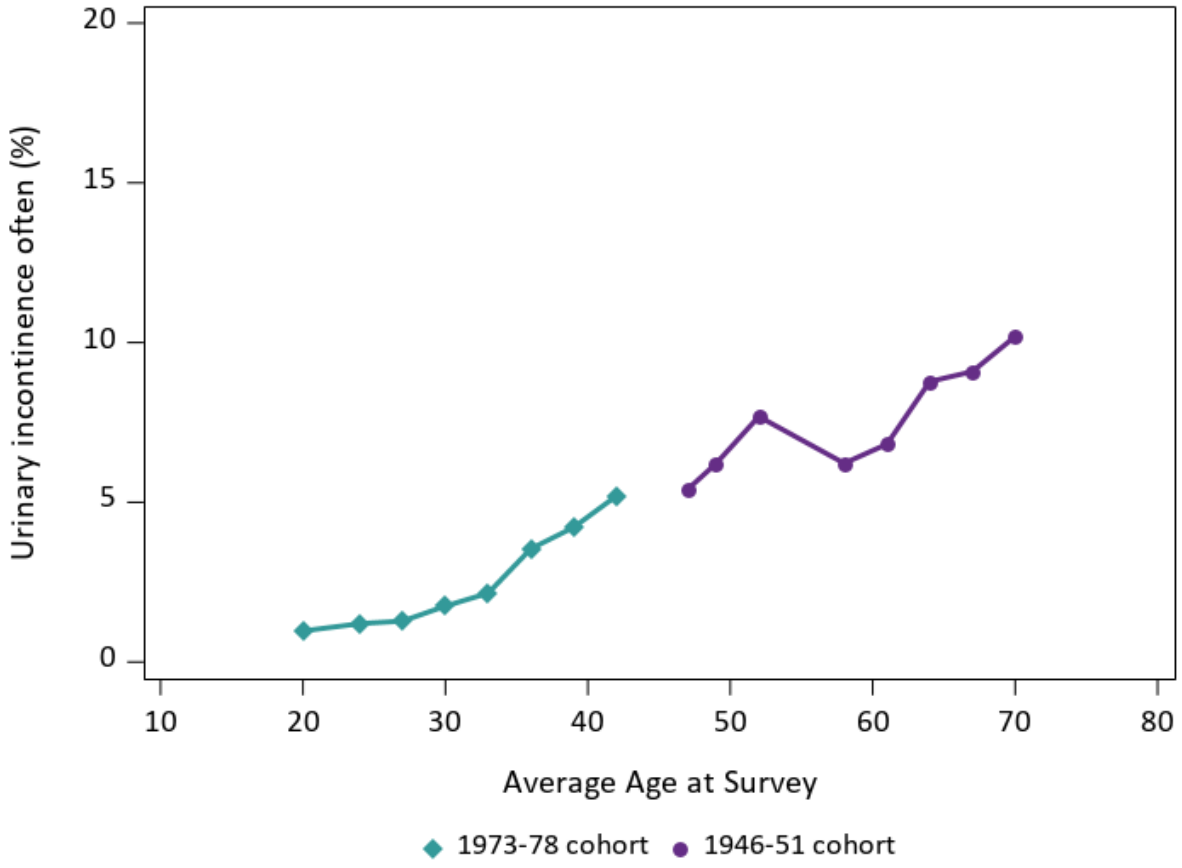

Figure 4-26: Percentage of women reporting urinary incontinence, by age for each cohort.

The prevalence of urinary incontinence is shown in Figure 4-26. Generally, it follows the pattern of increasing with age. However, the questions about urinary incontinence have varied somewhat across surveys and this may account for the inconsistency at the third survey for the 1946-51 cohort. As with some other chronic conditions, women in 1973-78 cohort appear to have urinary incontinence at a younger age than the older cohort, though this needs to be confirmed with more data points.

Asthma

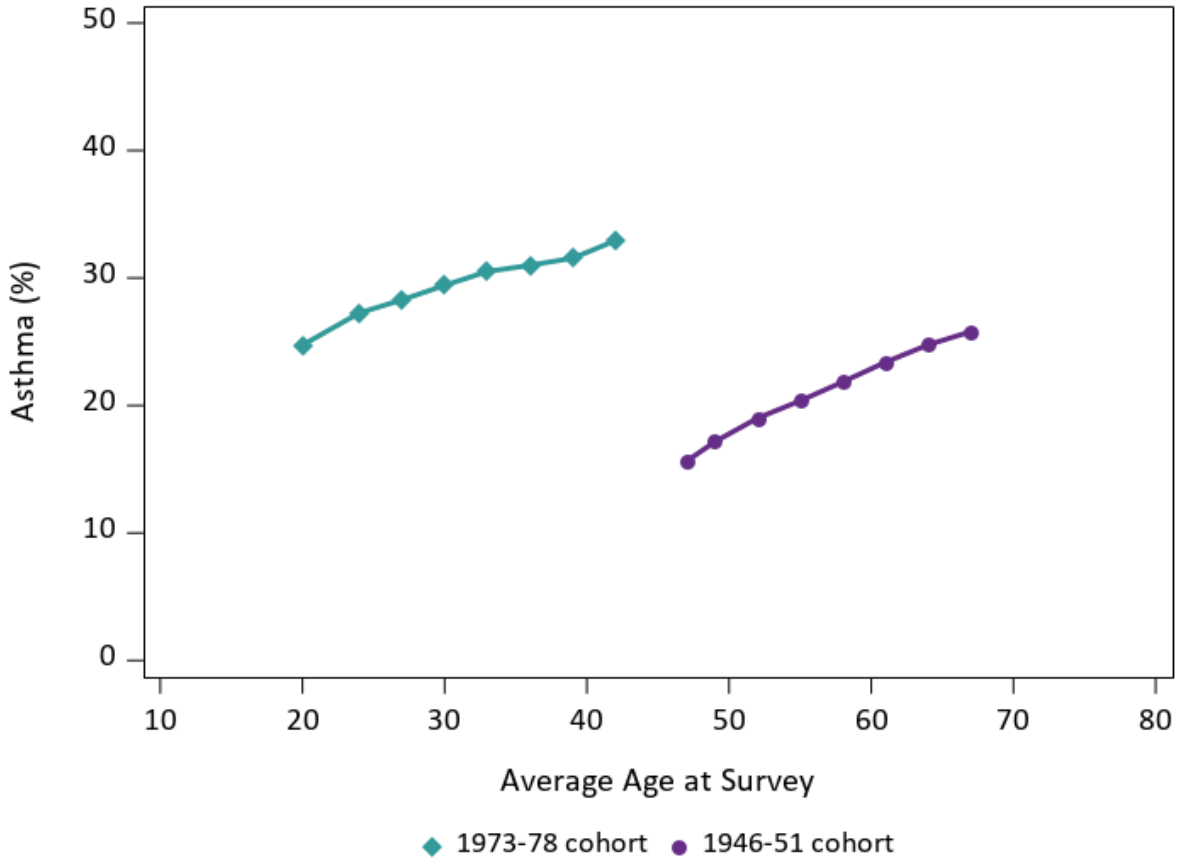

Figure 4-27: Percentage of women reporting a history of asthma (excluding asthma in childhood), by age for each cohort.

It is well-known that asthma prevalence differs substantially across cohorts. While the reasons are not well-understood, changes in clinical definitions and diagnoses over time are believed to contribute to the difference. The effect is clear in Figure 4-27 which shows that asthma is much more common in the 1973-78 cohort than among women in the 1946-51 cohort, however asthma increased with age in both cohorts. For this report asthma prevalence was estimated cumulatively across successive surveys, but asthma reported only in childhood was not included.

4.4 Use of health services

4.4.1 General practitioner visits

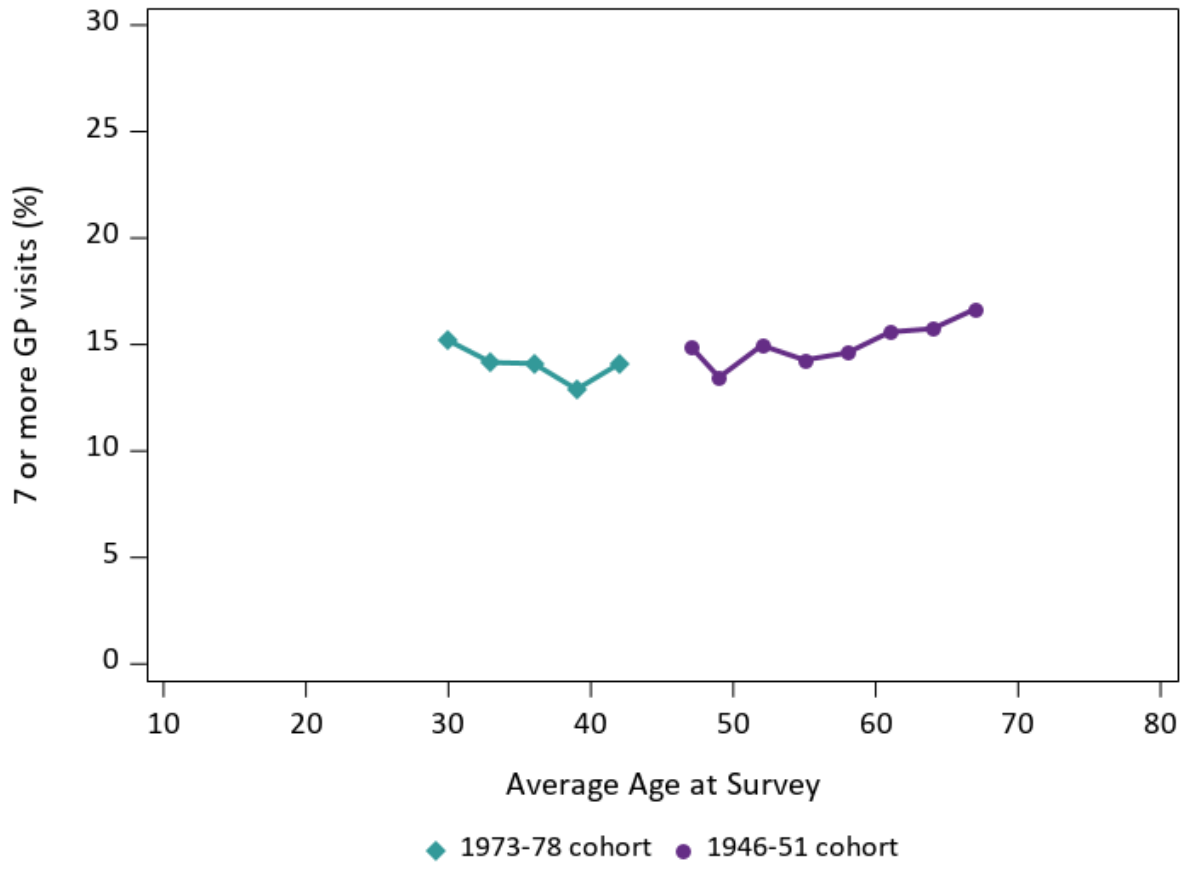

Figure 4-28: Percentage of women who had 7 or more visits to a general practitioner in a year, by age for each cohort.

Figure 4-28 shows the percentage of women who had seven or more general practitioner visits in a year. This percentage was fairly constant with age across both cohorts, but this obscures several differences in health service use, with the median number of visits increasing with age (Byles et al., 2017).

4.4.2 Specialist visits

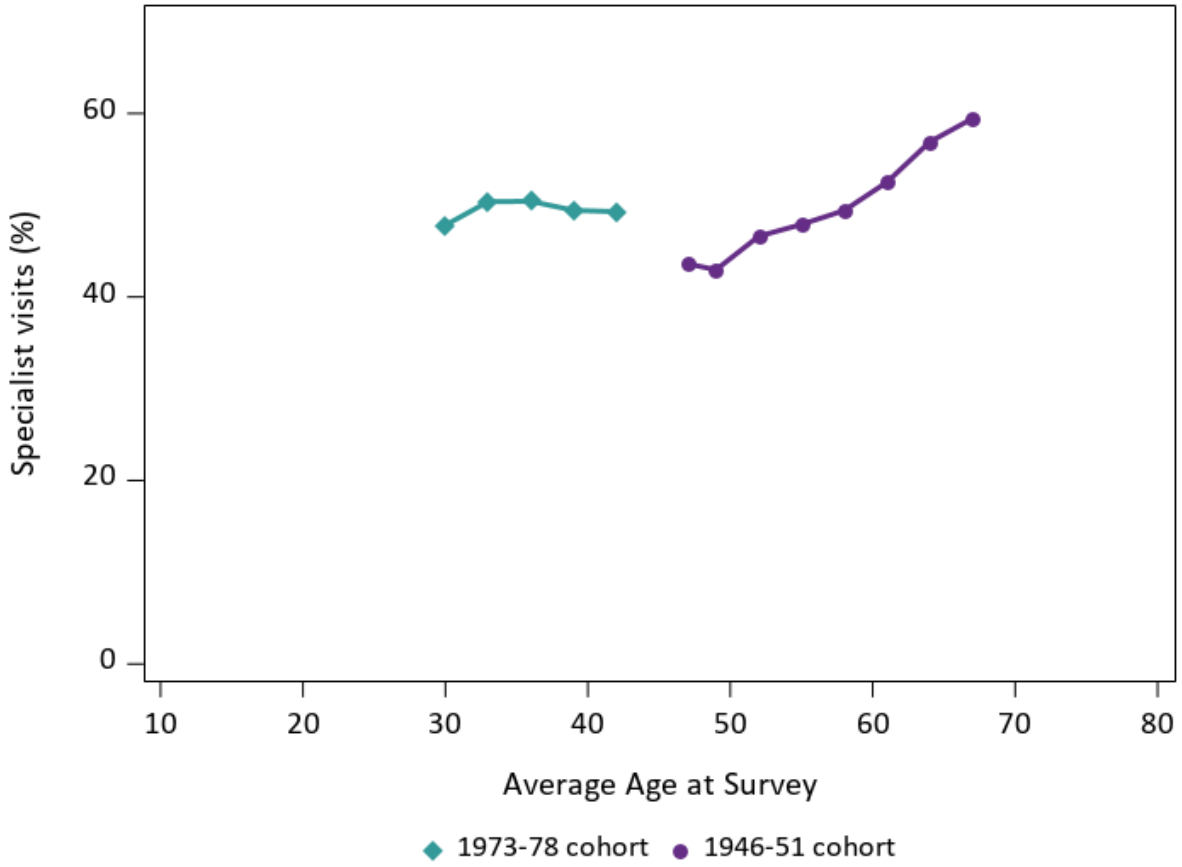

Figure 4-29: Percentage of women who saw a specialist in a year, by age for each cohort.

Figure 4-29 shows that as women in the 1946-51 cohort became older they were more likely to visit a specialist. Although the percentage of women in the 1973-78 cohort percentage showed little overall change in their 30s and early 40s, they were more likely to visit specialists than the 1946-51 cohort at around age 50 years.

4.4.3 Hospital stays

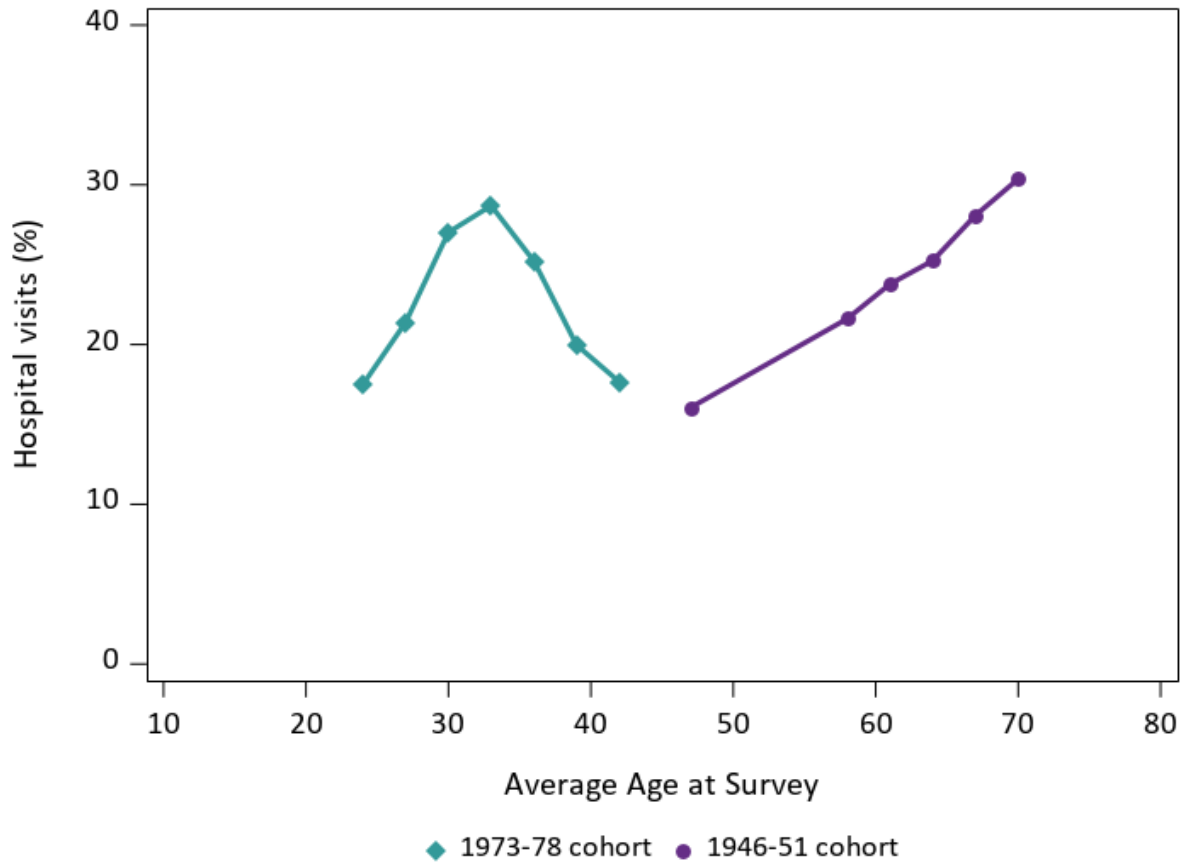

Figure 4-30: Percentage of women having a hospital stay, by age for each cohort.

Figure 4-30 highlights the substantial differences between the life stages of the cohorts as women in the 1973-78 cohort were much more likely to have hospital stays during the time associated with pregnancy and childbirth. In contrast, hospitalisation among the 1946-51 cohort increased with age and is consistent with the rising prevalence of chronic conditions.

4.4.4 Hysterectomy

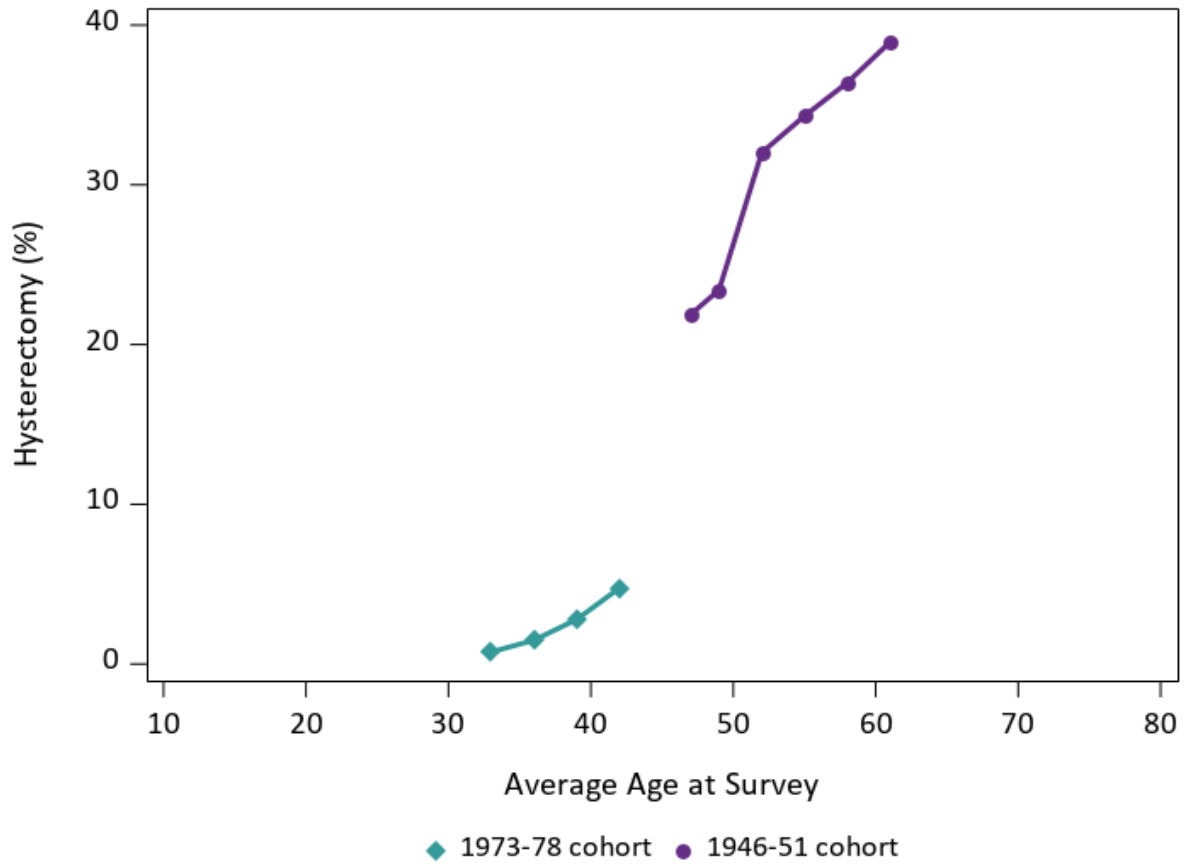

Figure 4-31: Percentage of women having had a hysterectomy, by age for each cohort.

Patterns of health care also change over time. This is illustrated in Figure 4-31 showing the prevalence of hysterectomy. While incidence of hysterectomy increases with age as a response to a variety of medical conditions, the prevalence among the 1973-78 cohort when they were aged over 40 was less than 5%, whereas it exceeded 25% for the 1946-51 cohort when they were aged 45-50 in 1996. This procedure has become much less common over the last 20 years.

5. SOCIAL AND PERSONAL CIRCUMSTANCES

This section of the report looks at changes in the women's lives and circumstances through mid to later life. We compare patterns of change for women in the 1946-51 cohort as they age from their mid-40s to their 70s. We then look at the 1973-78 cohort, who are now in their 40s, to compare their circumstances now with their mother's generation when they were of similar age.

5.1 Key points

- In terms of employment, women in the 1946-51 cohort not in the workforce most of the time had the lowest SF-36 scores for mental health and physical functioning at each age point compared with other employment categories that showed little difference. Similarly for the 1973-78 cohort, though here the category combined part-time employment and not in the workforce.
- For relationship status, those in the 1946-51 cohort who were always partnered had the highest SF-36 scores mental health and physical functioning scores, while those who were single or were no longer in a partnership had the lowest. Similar differences were evident in the 1973-78 cohort (with the differences being clearest for physical functioning as the women approached their 40s).
- Social needs and roles of women are a key factor in women's lives, with women in both cohorts who reported lower levels of social support having the lowest mental and physical functioning score across the age range. This was similarly the case for women who needed help with daily tasks and for those who had a caring role in regard to mental health.
- Women in the 1946-51 cohort at age 68-73 who reported a fall to the ground in the previous 12 months were found to have markedly lower social and physical function and mental health scores and a higher percentage were stressed about different aspects of their lives (from relationships with spouse and children to health and managing on their income). The same findings were seen for those who had reported a fall to the ground.

5.2 Work (including voluntary/unpaid), occupation and retirement

5.2.1 Percentage in the workforce at different ages

Women's participation in the workforce is important, not only for their own and their family's financial wellbeing, but also for their identity, independence, and sense of worth. In most high-income countries, women's engagement in paid work has increased dramatically over recent decades. In Australia, women's workforce participation has increased by 15 percentage points since the 1970s, offsetting a net decline in men's workforce participation (Gustafsson, 2021). Middle-aged women (aged 45–64 years) particularly are engaging more in paid employment options, with more recent cohorts having much higher engagement in paid work in their 50s than previous generations did (Gustafsson, 2021). However, as women move into and through their 60s many will consider "retirement" from paid work, either through a lifestyle choice, illness, or redundancy. Others will leave work, either temporarily or forever, to care for an ill or disabled family member. Work and health are also strongly correlated with many women leaving paid work due to illness (Pit & Byles, 2012).

When we consider the 1973-78 cohort, many of these women may have left the workforce to have and to raise children or for other reasons, and as they move into their 40s may want to increase their workforce participation. However, their ability to work may be affected by a number of factors including their employability and their work ability. The latter reflects the health resources that allow them to continue to work. The health of women in their 40s will strongly influence their ability to remain in work through their 60s.

In Figure 5-1 we present the work status of women in the 1946-51 cohort as they age from their 40s through to their 70s and compare that with the work status of women in the 1973-78 cohort as they age from their 20s to their 40s. The two cohorts almost present a picture of the average working life cycle but bearing in mind that they are from two different cohorts who have experienced very different cultural and social environments in terms of education, industrial relations and work cultures, fertility rates, and support with childcare.

Work status was based on the hours worked as reported in each survey. This variable was categorised as:

- Not in the work force (NITW)
- 1-34 hours per week – Part-time work
- 35+ hours per week – Full-time work

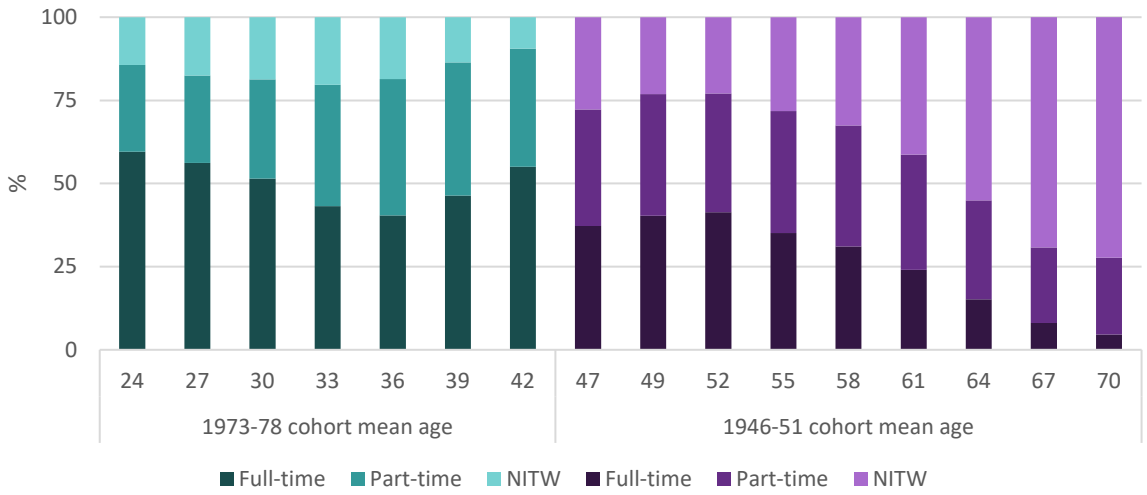

Figure 5-1: Observed working status for the 1973-78 and 1946-51 cohorts.

When women in the 1946-51 cohort were in their 40s, around one in four were in paid work, mostly part-time. As the women moved through into their 50s the proportion in the workforce increased. At around age 55 the proportion not in paid work began to increase. This change likely reflects the increasing proportion of those who considered themselves “retired”. At Survey 4, when women were around 55 years of age, 20% of women considered themselves fully retired and 11% considered themselves partially retired. By Survey 9, when the women were around 70, 82% were fully retired and 10% were partially retired. Note also that at Survey 9 around 2% of women reported they had never been in paid work.

Turning to the 1973-78 cohort, we see that these younger women are more likely to be in the workforce compared with the previous generation, with nine out of 10 women employed in their early 40s, mostly full-time. There is also a slight dip in women’s workforce participation, especially full-time work, in the mid 30s when many of these women were having children.

5.2.2 Patterns of workforce participation over time

While the previous figures show the proportions who are working at each time point, they do not show the change over the women's lives. To show these patterns, we have applied longitudinal latent class models that group women according to common patterns of change in work overtime.

Four main patterns were identified for the 1946-51 cohort, mostly telling a story of women's exit from the workforce from either full-time or part-time work. These classes represent:

- 18% in "Full-time → NITW (Earlier)": Women who move from full-time work to do no work, with a reduction in full-time work from age 52 onwards (earlier exit from full-time work).
- 25% in "Full-time → NITW (Later)": Women who move from full-time work to no work, with a reduction in full-time work from age 64 onwards (later exit from full-time work).
- 30% in "Part-time → NITW": Women who were mainly in part-time employment with a reduction in work from 64 onwards (exit from part-time work).
- 27% in "Mainly NITW": Women who were mainly unemployed at all ages.

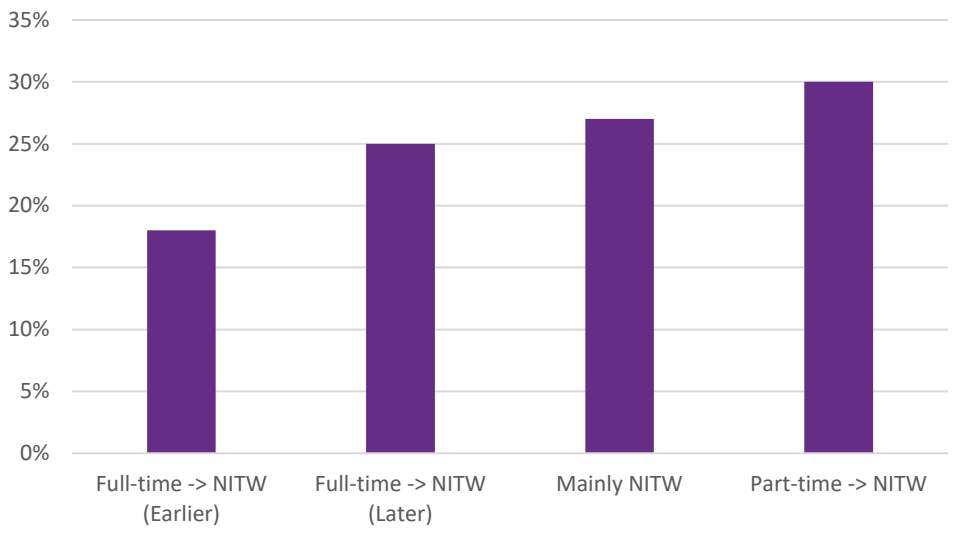

Figure 5-2: Four patterns of work for women in the 1946-51 cohort: ageing from 47 to 70.

A different picture was identified for the 1973-78 cohort, representing their different life stage:

- 31% in “Full-time → Part-time → Full-time”: women who combined full-time and part-time work, with increasing part-time work in their 30s (full-time to part-time).
- 13% in “NITW/Part-time”: women who were mainly not in the workforce, or part-time.
- 35% in “Full-time”: women who were mostly employed full-time from their 20s through to their 40s.
- 21% in “Full-time → Part-time/NITW”: women who were full-time employed in their 20s then transitioned to part-time or not in the workforce (reduced work).

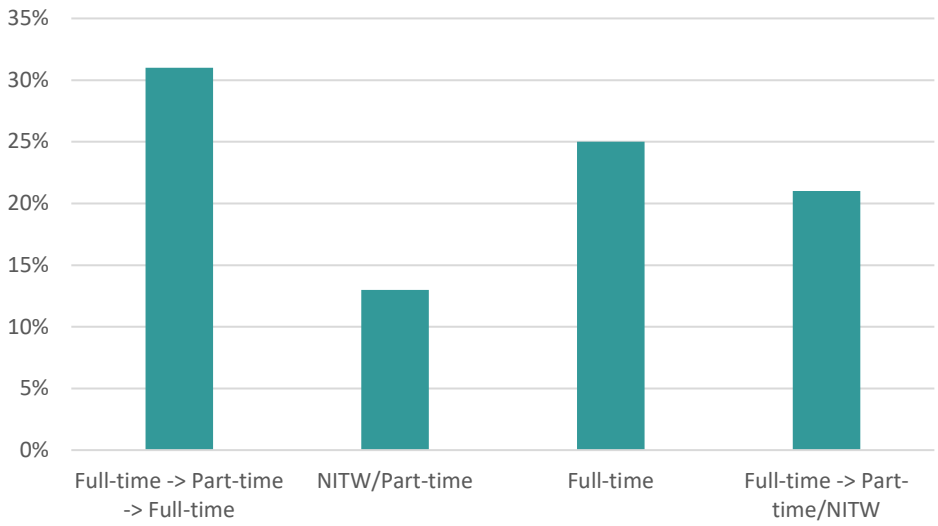

Figure 5-3: Four patterns of work for women in the 73-78 cohort: ageing from 24 to 42.

These different patterns of work were also associated with different trajectories for mental and physical health. Figure 5-4 and Figure 5-5 show the SF-36 Mental Health scores for the two cohorts, and Figure 5-6 and Figure 5-7 show the SF-36 Physical Functioning scores.

For women in the 1946-51 cohort, the 27% of the cohort who were not in the workforce for most of the time had the lowest mental health scores, with little difference in scores for the remaining women with different patterns of full-time or part-time employment. Similarly, for women in the 1973-78 cohort the worst scores were for those who were mostly not in work. These differences may reflect the impact of not being in paid work

on mental health, or that some women with poor mental health are unable to find or undertake paid work. Overall, mental health scores are lower for women in the 1973-78 cohort than in the 1946-51 cohort. Scores in the 1946-51 cohort also generally increase as women age, regardless of their work patterns.

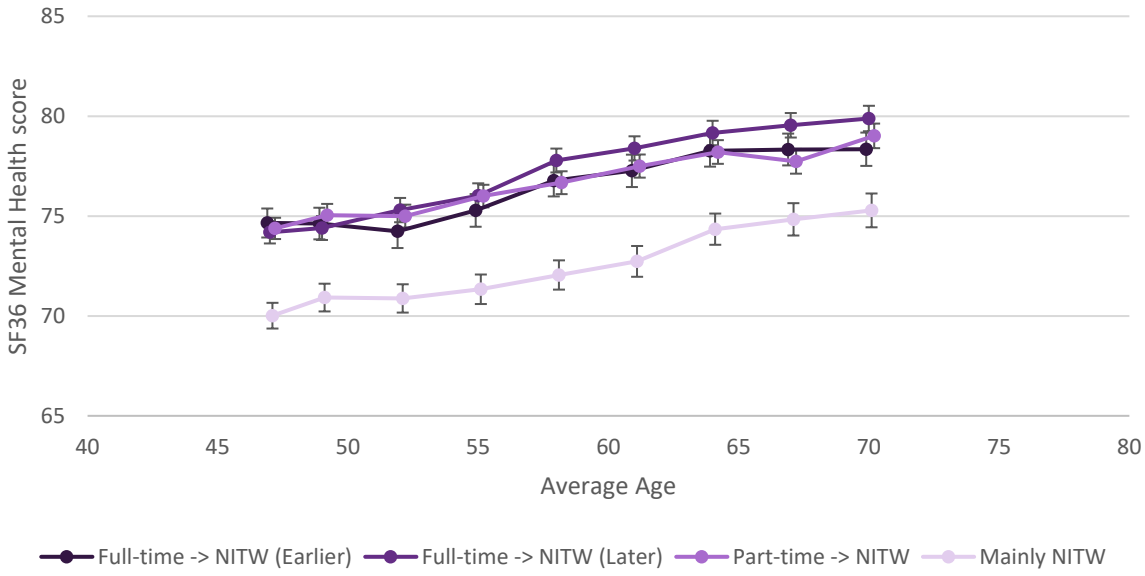

Figure 5-4: SF-36 Mental health score by LCA class across ages for women in the 1946-51 cohort.

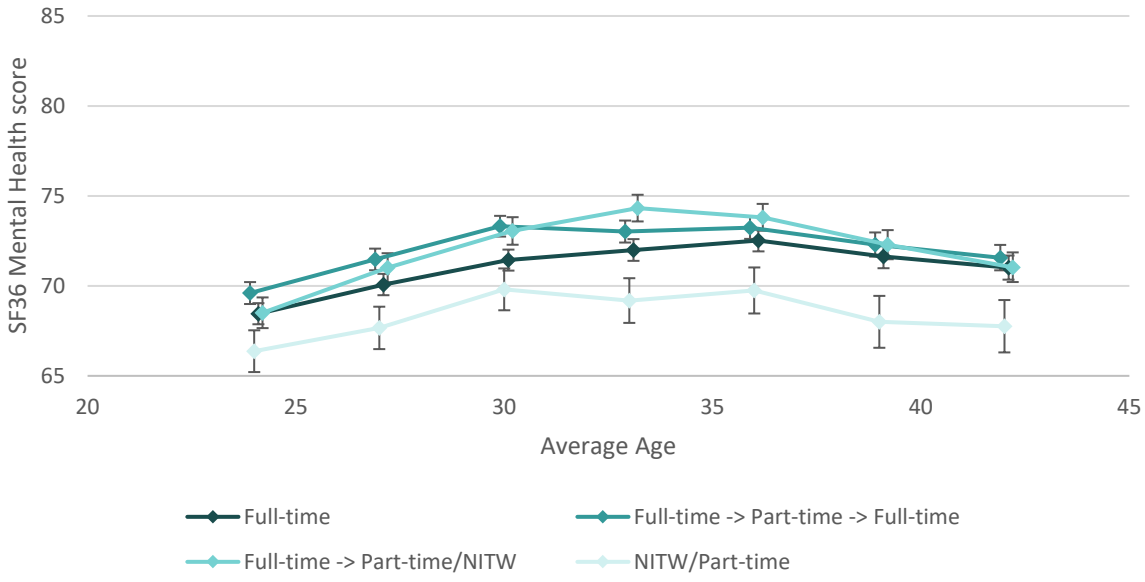

Figure 5-5: SF-36 Mental health score by LCA class across ages for women in the 1973-78 cohort.

Women in the 1946-51 cohort who were not in the workforce had significantly worse physical functioning scores across all survey points, with scores declining as the women aged. Again, this relationship can be bidirectional. There was also a divergence in scores for the other groups at older ages, starting when women were in their 40s. Those who exited the workforce later had the best physical functioning, followed by those who remained in the workforce part-time (Figure 5-6).

For the 1973-78 cohort, there is less of a decline in physical functioning over time. There is however a clear distinction between the groups with patterns of being in full-time and part-time work and those women who are not in the workforce (Figure 5-7). This “not in work” group also shows a more marked decline from the mid-30s onwards, compared to the other groups. Also of note is the similarity in scores between women in the 1973-78 cohort when they are in their 40s (last survey point) and women in the 1946-51 cohort when they were in their 40s.

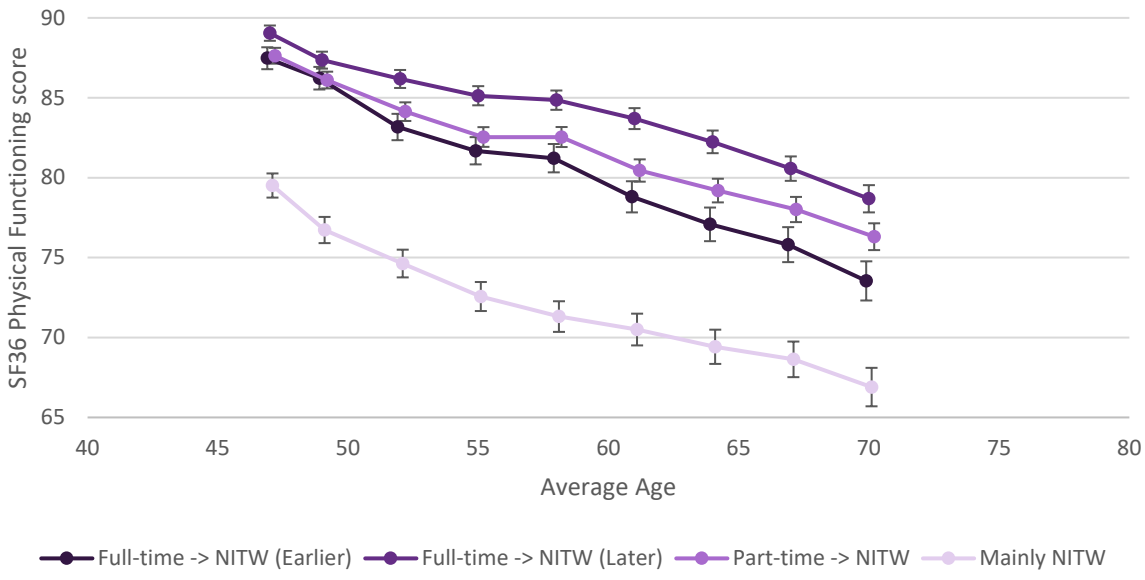

Figure 5-6: SF-36 Physical functioning score by LCA class across ages for women 1946-51 cohort.

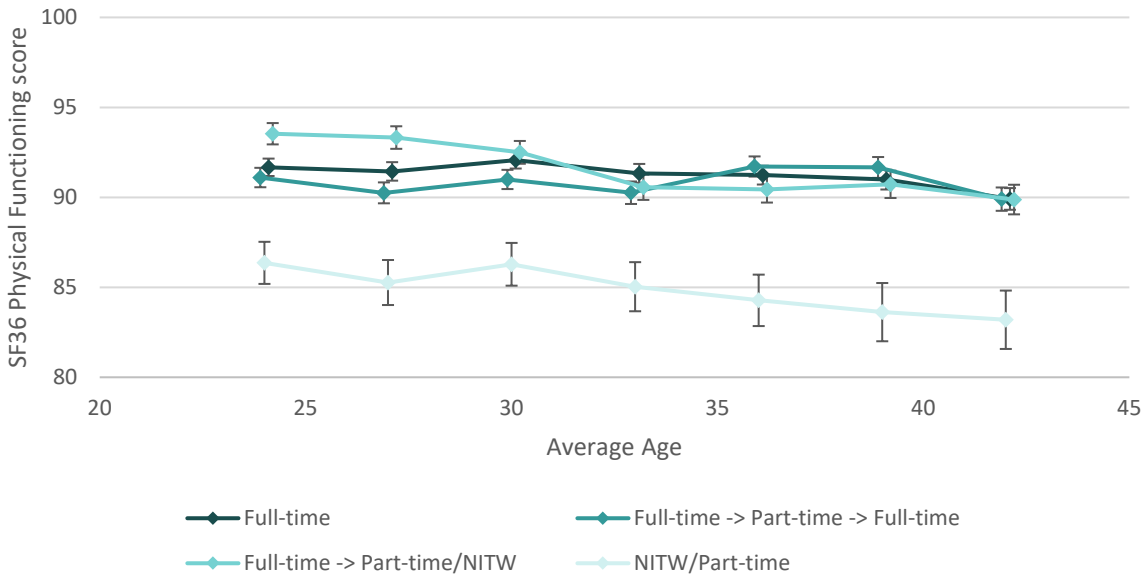

Figure 5-7: SF-36 Physical functioning score by LCA class across ages for women in the 1973-78 cohort.

5.2.3 ALSWH studies of women, work and midlife

When the study commenced in 1996, around 36% of the women in the 1946-51 cohort were employed full-time and 30% were employed part-time. These proportions closely reflected the work status for all Australian women aged 45-50 years at that time. It was clear from that early data that health was related to work. Among women who reported they were in excellent health, 76% were employed, and 24% were unemployed; among women who reported they were in poor health the proportions were reversed with 27% employed and 73% unemployed. There was also a relationship between hours worked and SF-36 mental health and physical health scores. Physical and mental health scores increased to an optimal score at around 40 hours work per week, with scores declining if women worked more than “full-time” (Bryson & Warner-Smith, 1998).

By Survey 3, when the women were aged 50-55 years, we found that many of the women were increasing their workforce participation and hours of work. The data also showed strong associations between employment, work hours, and physical health. Participants were asked if they were happy with their hours of work. Being happy with longer hours was more likely for women in professional roles than for women in manual occupations. For mental health, at Survey 2, it appeared that working between 15-34 hours was associated with optimal mental health scores. However, by Survey 3, this

apex point had increased to 35-40 hours, perhaps reflecting a shifting of tensions between work and family life (Braun & Clarke, 2006). A further analysis showed that women who were happy with their hours of work had better mental and physical health than women who would like to work either more hours or fewer hours. This was true irrespective of how many hours the women actually worked (Warner-Smith & Mishra, 2002).

By Survey 5, the women were aged 57-61 years. An analysis at that time compared women according to their workforce participation. Women's ongoing participation in the workforce at these ages was affected by both sociodemographic and health factors. Single women and those from more disadvantaged areas were more likely to be in the workforce, while those with caring responsibilities for people they live with or had health conditions were less likely to work (Pit & Byles, 2012) than other women.

At the time that the women were aged 60-64 years, a longitudinal analysis was undertaken to understand women's changing pattern of work over time, and as they approached an age when they might be expected to retire. While the majority of women had been in paid work at Survey 1, most transitioned in and out of paid work over the successive surveys. Around 49% of women were in paid work by Survey 6 (60-64 years). Taking account of the transitions in and out of work over time, we were able to identify five main patterns, similar to the four patterns presented in this report. Almost half of the women (48%) were in the 'mostly in paid work' category, responding 'yes' to being in paid employment at most time points. Chronic diseases (diabetes, asthma, depression and arthritis) were less prevalent in this group compared with other classes (Majeed, Forder, Mishra, & Byles, 2015). This was not the case for all chronic conditions, as another study found no association for women with breast cancer having distinct patterns of time allocation in work or leisure (Gao, Ryan, Krucien, Robinson, & Norman, 2020).

Beyond work, the study has also examined what women expect from retirement. At the time that the women were aged 55-60 years, we conducted an in-depth sub-study on women's plans for retirement (Byles et al., 2013). At this time around 40% of respondents had retired or had not been in work for many years, 4% were thinking about retiring in the next two years, and 56% were not planning to retire in the near

future. Many of the women received or expected to receive an aged pension or similar (46% of not retired, 29% of partly retired, and 15% of completely retired women), and many women expected to receive income from savings and/or investments (34% of not retired, 48% of partly retired, and 44% of completely retired women). Among women who were partly or completely retired, the most common reason given for retirement was being “fed up with working/stresses” (40% of partly retired, 37% of completely retired). Most women felt retirement was something they wanted to do (67% of partly retired, 60% of completely retired), or something that was partly their choice (23% of partly retired, 28% of completely retired). Only 11% and 10% of women in each group, respectively, felt that retirement was something they were forced to do.

We identified three main reasons for retirement:

- Personal factors – including the need to care for spouse or other family members, the need to care for grandchildren, having a work-related illness or injury, and the number of people dependent on the respondent for financial support.
- Financial factors – including access to pensions or superannuation funds, overall financial security, being retrenched, or tax benefits.
- Work-related factors – including a desire for a different lifestyle, stresses and pressures of work, and declining interest in work.

Women’s plans for retirement included:

- Lifestyle – visiting grandchildren, volunteering, contributing to community, pursuing hobbies, gaining new skills, travel, staying physically active, adapting to changing needs and wants, and providing care to others.
- Independence – living life on their own terms, making their own decisions, and getting older and wiser.
- Finances – having enough money.
- Decline – declining health, slowing down, not being useful. Most women, however, did not relate to these ideas.

Paradoxically, a number of women included aspirations to reinvent themselves, including new or different types of work.

- New career – starting a business, working in the same type of job but under different terms, working in a different type of job, or working part-time. Around half of the women said they would never think of themselves as retired. Many planned to be working in retirement, including a small proportion of those women who identified as being completely retired.

Regarding attitudes to retirement, we found that while 25% of women agreed that “retirement means the end of working life”, most women endorsed the statements that “you are only as old as you feel”, and “retirement is not an ending but a beginning”.

It is evident that work plays a major role in the lives of women as they age from their 40s to their 70s. There is also a strong relationship between work and health, with health being both a resource to allow people to work (work ability) and with work potentially affecting women’s wellbeing. These associations may also be mitigated by the balance between work and other demands on women’s time and attention, and their opportunities for leisure and self-fulfilment.

5.3 Relationship changes

In this section we present data on women’s relationship changes as they age from their 20’s to their 40’s (1973-78 cohort) and their late 40’s into their 70’s (1946-51 cohort). Self-reported relationship status is collected at all ALSWH surveys and categorised as follows:

1. Married
2. De facto relationship
3. Separated
4. Divorced
5. Widowed
6. Single

Married/de facto relationships were combined into a single group to represent partnered women.

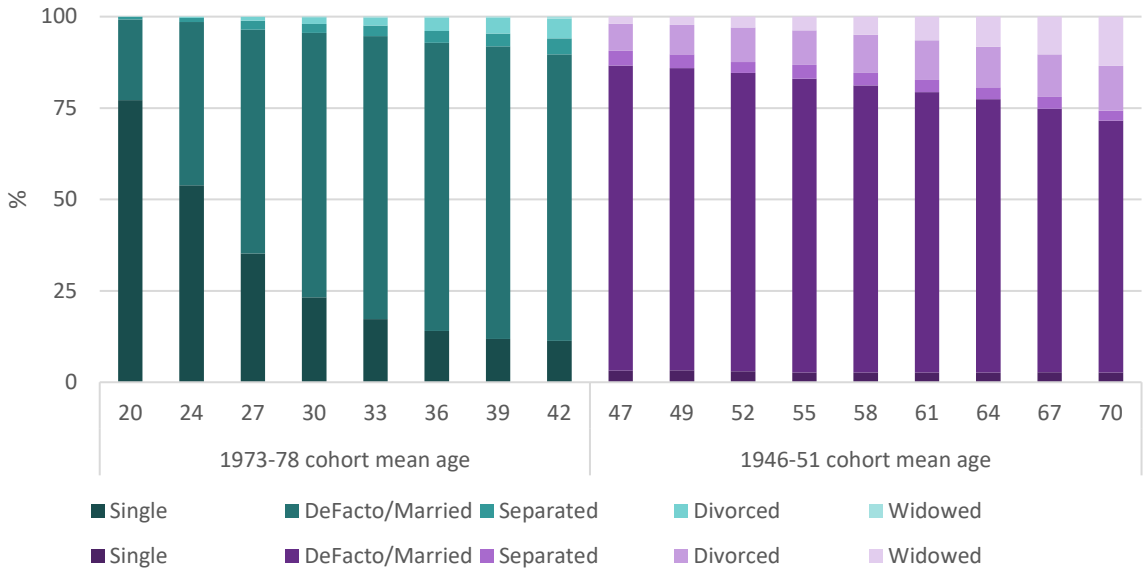

Figure 5-8: Observed relationship status for the 1973-78 and 1946-51 cohorts.

Figure 5-8 shows the responses for the women in both cohorts at each survey since 1996. For the younger women, increasing proportions became married or in a de facto relationship. For the older women, most were married at the start of the study, and with the proportion who were divorced or widowed increasing over successive surveys.

While these figures show the proportions in each relationship type at each time point, they do not show the change over the women's lives. To show these patterns, we have applied longitudinal latent class models that group women according to common patterns of change in relationship status over time. Five main patterns were identified for the 1946-51 cohort. The first two groups had consistent relationship status over time, the other three experienced change in their relationship status. These classes represent:

- 2.3% in "**Always single**": Women who only ever reported being single.
- 64% in "**Always partnered**": Women who only ever reported being partnered (married/de facto relationship).
- 15% in "**Mostly separated/divorced**": Women who reported being separated or divorced on most surveys.

- 11% in "**Partnered → Later separated/divorced or widowed**": Women who were mostly partnered until their late 60s and early 70s when they became either separated/divorced or widowed.
- 8% in "**Partnered → Widowed**": Women who were partnered in their 40s and were later widowed.

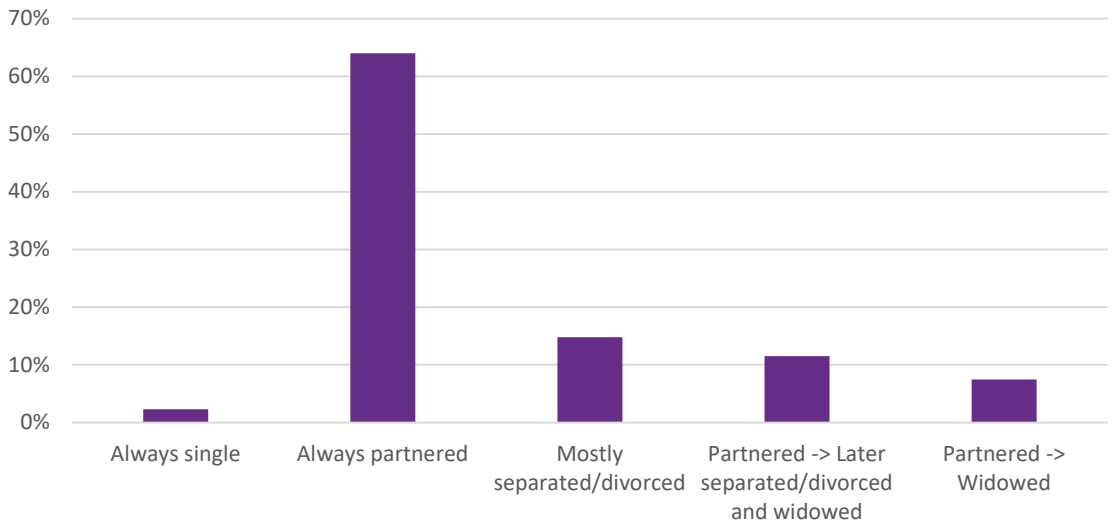

Figure 5-9: Five patterns of relationships for women in the 1946-51 cohort from age 47-70 years.

For women in the 1973-78 cohort, four distinct patterns of relationship change over time were found. These patterns were:

- 51% in "**Single → Partnered (early)":** women who were single in their early 20's and soon became and stayed partnered.
- 24% in "**Single → Partnered (later)**": women who were single in their early 20's and became partnered from their 30s onwards.
- 14% in "**Mostly single**": women who were single from their 20s through their 40s.
- 11% in "**Partnered → Previously partnered**"- women who were partnered in their early 20s and increasingly became separated or divorced.

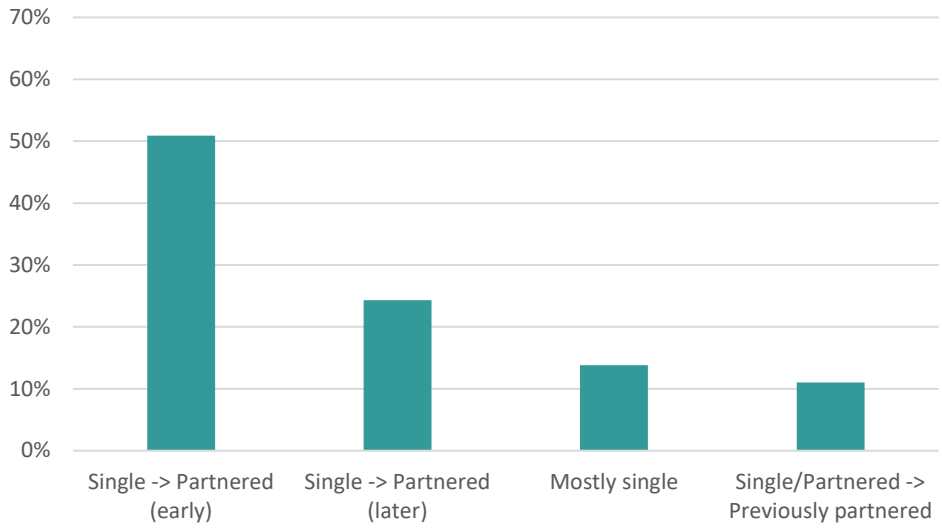

Figure 5-10: Four patterns of relationships for women in the 73-78 cohort: ageing from 24 to 42.

These different relationship patterns were also associated with different trajectories for mental and physical health. Figure 5-11 and Figure 5-12 show the SF-36 Mental Health scores for the two cohorts. For the 1946-51 cohort, there was significant overlap in scores between groups at most time points, but with women who were always partnered having higher mental health scores and those who were mostly separated/divorced having lower scores (Figure 5-11). Over time, the scores for women in the always single group increased, converging with the scores for women who were always partnered. Scores for separated/divorced women also increased, approaching the mental health scores for the other groups. Scores for women who became separated/divorced or widowed decreased when women were around 60, converging with scores for women who had been separated or divorced for the majority of the study period.

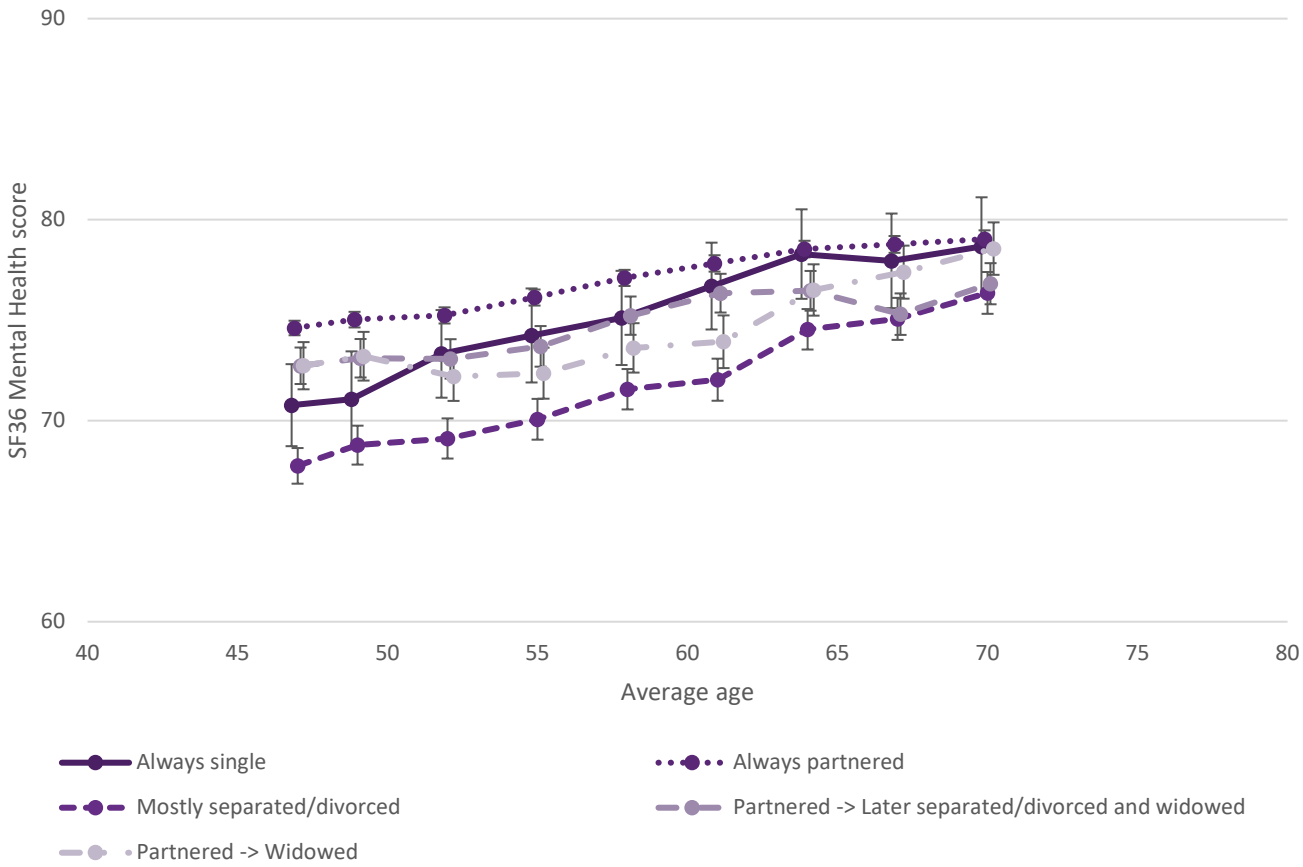

Figure 5-11: SF-36 Mental health score by relationship pattern across ages for women in the 1946-51 cohort.

For the 1973-78 cohort we see the highest mental health scores for those women who became partnered, with an earlier increase in scores for those who were partnered earlier, and a later increase in score for women partnered later (Figure 5-12). Women who were single and those who became previously partnered had the lowest mental health scores.

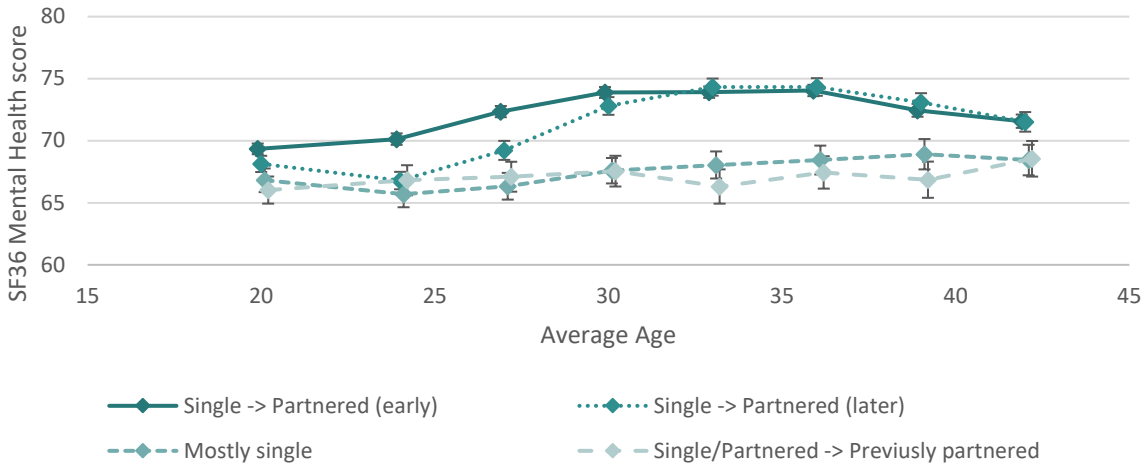

Figure 5-12: SF-36 Mental health score by relationship pattern across ages for women in the 1973-78 cohort.

In regard to physical functioning, women in the 1946-51 cohort who were always single or mostly separated/divorced had the lowest scores (Figure 5-13).

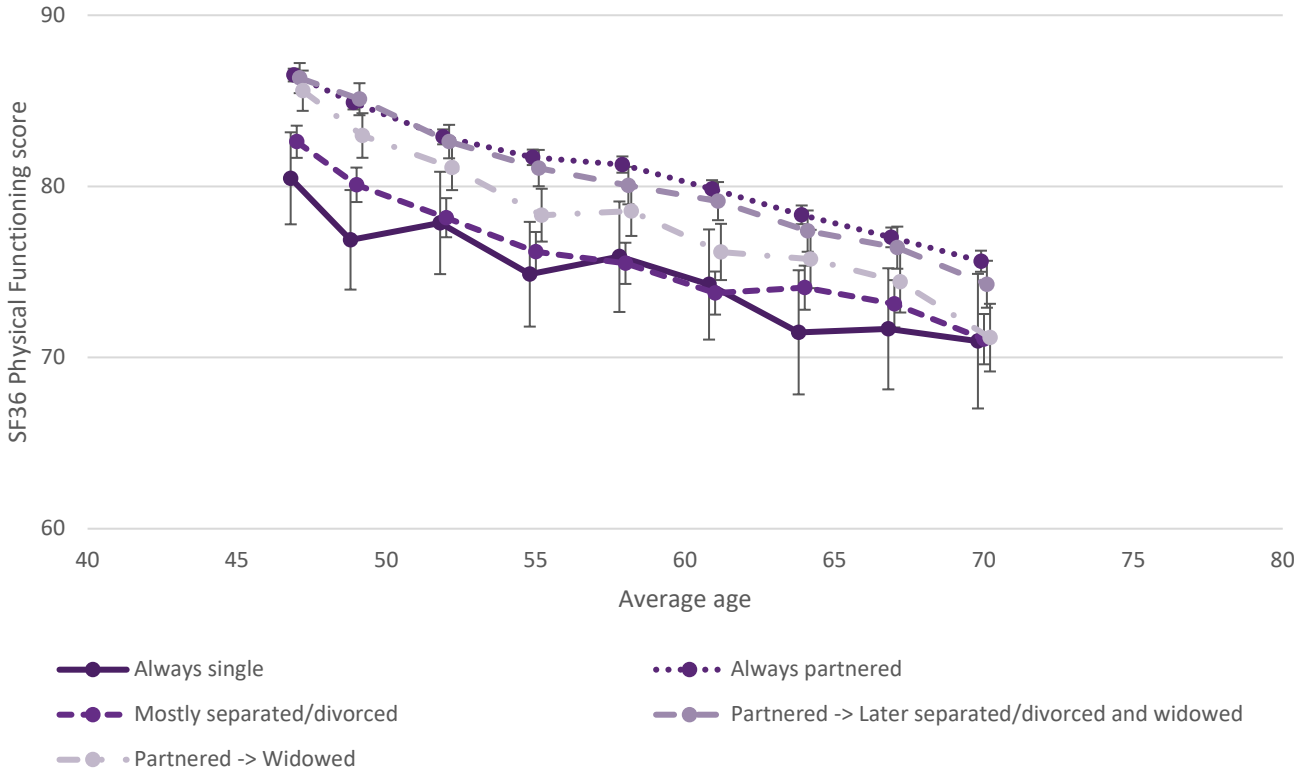

Figure 5-13: SF-36 Physical functioning score by relationship pattern across ages for women in the 1946-51 cohort.

For women in the 1973-78 cohort, who were single or previously partnered had lower physical functioning scores than those who were partnered (Figure 5-14). The difference between these groups increased as the women approached their 40s.

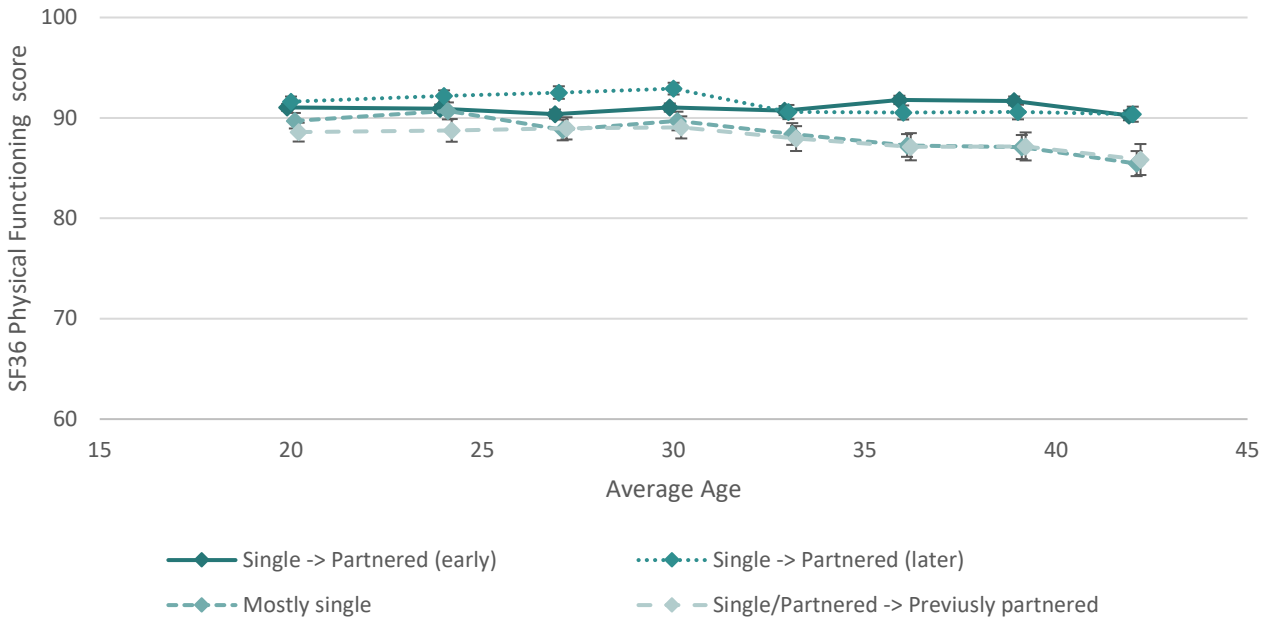

Figure 5-14: SF-36 Physical functioning score by relationship pattern across ages for women in the 1973-78 cohort.

These data show the changes in women's relationships over time, with a general trend for women to move into relationships in earlier life and to become single in later life. For young women, moving into a relationship appears to have positive influences on their mental and physical health. For older women, becoming separated/divorced or widowed is associated with a measurable effect on women's mental health, but with evidence of improvement in scores over time. We have also observed this effect in the 1921-26 cohort, where women who were divorced had decreased mental health scores prior to and soon after they were no longer in the relationship, but a subsequent increase in scores over the next few years.

5.4 Social support

Social support is generally considered to be an important component of human health, complementing and enhancing our intrinsic physical, cognitive and psychological resources, helping to meet essential and existential needs, and improving access to care and other services. This support can be instrumental, helping people do things, or expressive, sharing thoughts and feelings. For the women in the 1946-51 and 1973-78 cohorts, we have measured social support from Survey 2 onwards using the 6-item Medical Outcomes Study (MOS) scale abbreviated form of the (19 item) MOS support index (Ware & Sherbourne, 1992). This scale measures domains of tangible support, affectionate support and positive social interaction, and emotional/informational support (Holden, Lee, Hockey, Ware, & Dobson, 2014). The items in the scale are covered in the survey as follows:

People sometimes look to others for companionship, assistance, or other types of support. How often is each of the following kind of support available to you if you need it?

- *Help you if you are confined to bed*
- *Take you to the doctor if you need it*
- *Share worries and fears with*
- *Turn to for suggestions about how to deal with a personal problem*
- *Do something enjoyable with*
- *Love and make you feel wanted*

In Figure 5-15 we show whether women identified experiencing these aspects of social support “none of the time” or “a little of the time” “some of the time”, “most of the time” or “all of the time”.

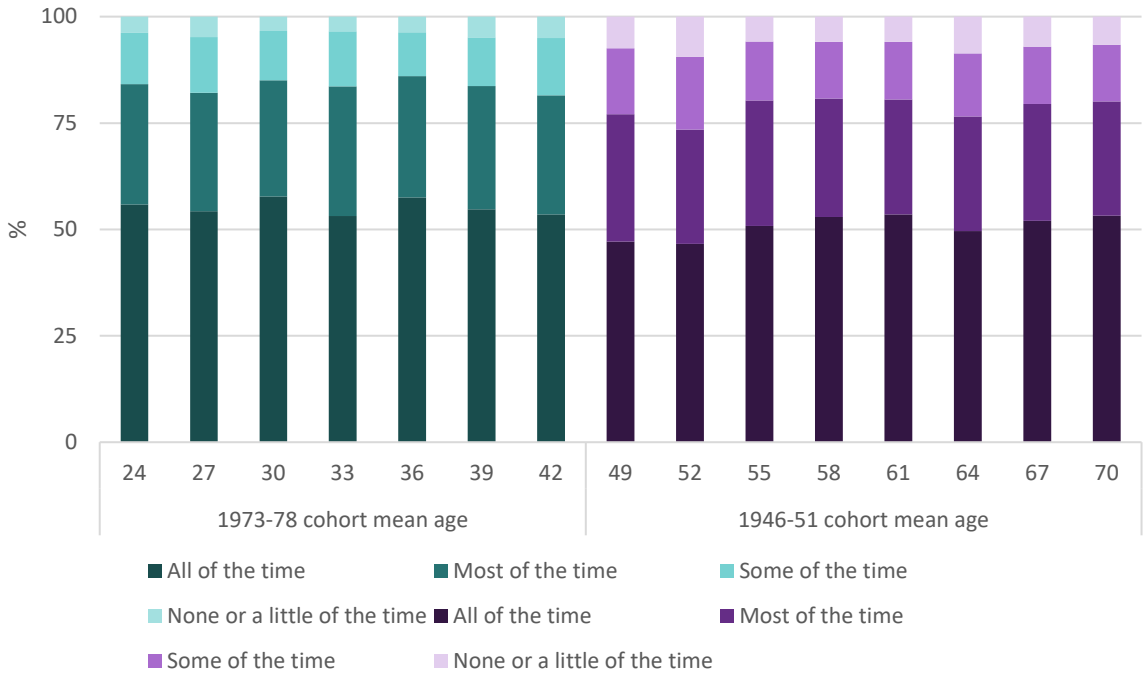

Figure 5-15: Observed levels of social support for the 1973-78 and 1946-51 cohorts.

At all ages across the two cohorts, most women felt they were supported all or most of the time. There appears to be a slight dip in the amount of time women feel supported in their early 40s (1973-78 cohort) and in their late 40s/early 50s (1946-51 cohorts). These middle years may represent a time when women feel they need more support and the amount of support they receive is not commensurate with their needs. Alternatively, these may represent years where women's support has diminished. It is likely both may be operating, as women pick up multiple responsibilities of work and care, with changes to their own health, and with possible relationship changes as seen in the previous section.

To show patterns of change in support over women's lives, we applied longitudinal latent class models that group women according to common patterns of social support over time. Three main patterns of social support were identified for women in the 1946-51 cohort. These patterns mainly differentiate between consistently higher and lower levels of social support, rather than patterns of change in social support over time.

The three groups represent:

- 45% - Women who had social support all the time
- 37% - Women who had social support most of the time
- 18% - Women who had lower levels of social support

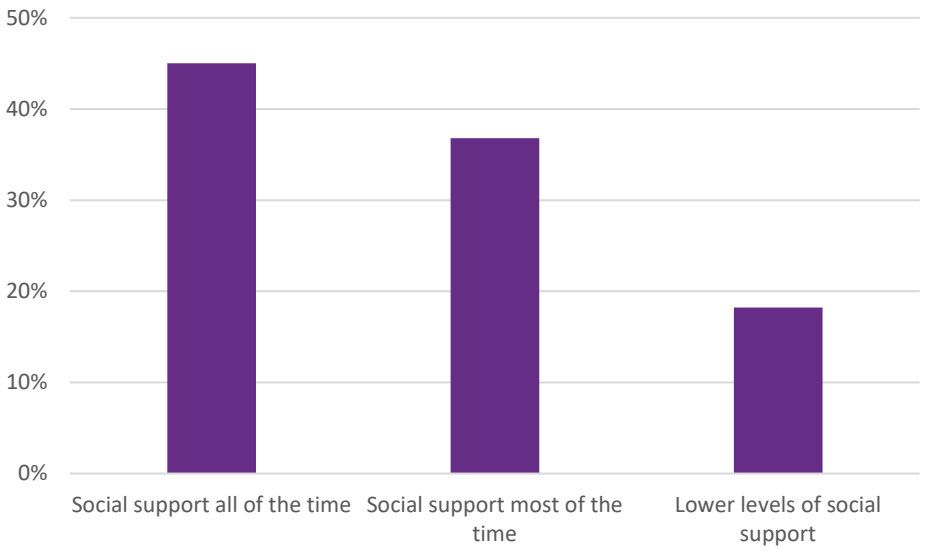

Figure 5-16: Three patterns of social support for women in the 1946-51 cohort: ageing from 47-70.

Similar patterns of social support were identified for women in the 1973-78 cohort, with three main groups representing:

- 47.2% - Women who had social support all of the time
- 38.0% - Women who had social support most of the time
- 14.8% - Women who had lower levels of social support

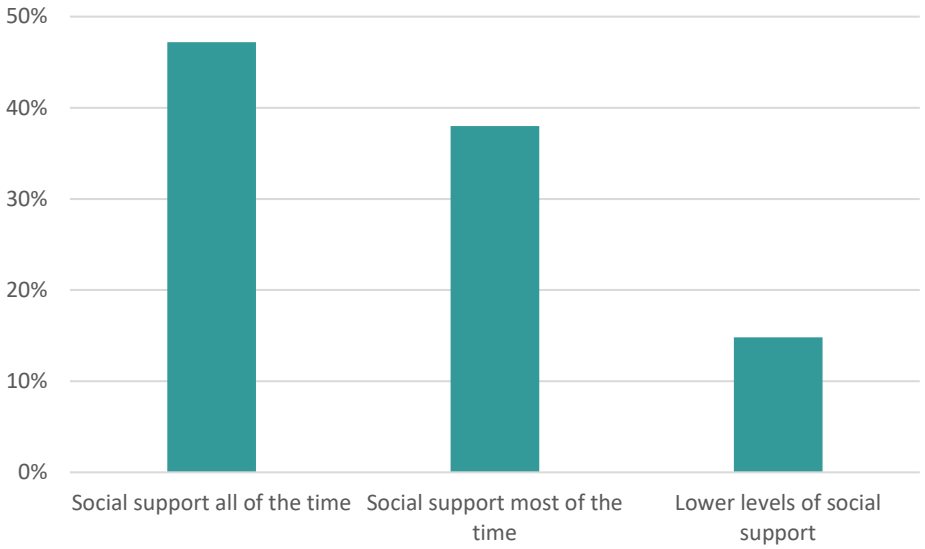

Figure 5-17: Three patterns of social support for women in the 73-78 cohort: ageing from 24 to 42.

These different patterns of social support were also associated with different trajectories for mental and physical health.

Figure 5-18 and Figure 5-19 show the SF-36 Mental Health scores for the two cohorts. For both cohorts, higher mental health scores were associated with higher levels of social support.

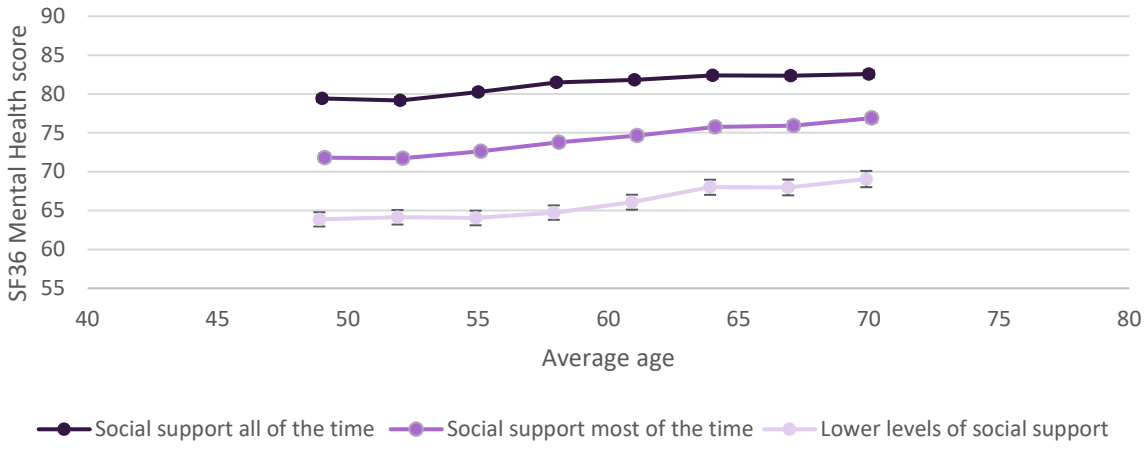

Figure 5-18: SF-36 Mental Health score by social support pattern across ages for women in the 1946-51 cohort.

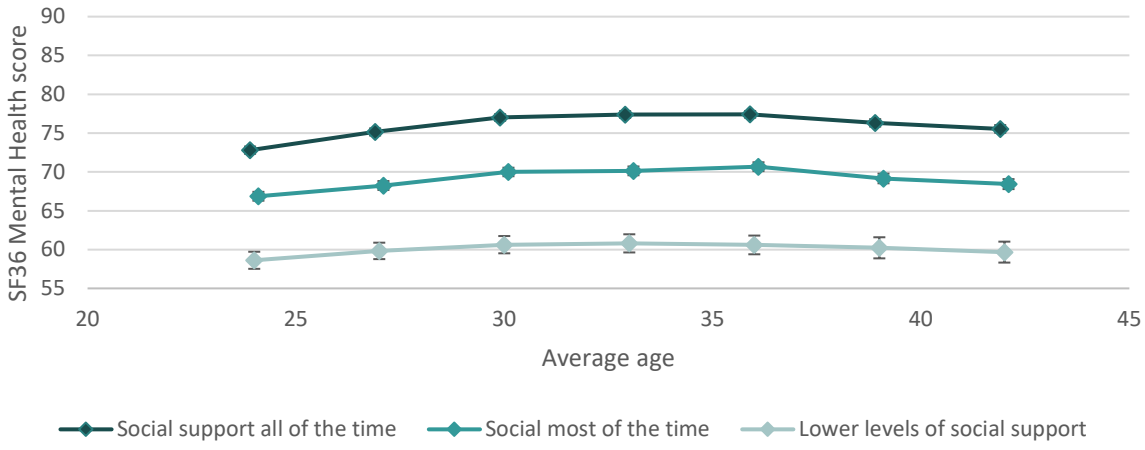

Figure 5-19: SF-36 Mental Health score by social support pattern across ages for women in the 1973-78 cohort.

Women in both cohorts with higher levels of social support also had higher levels of physical functioning. Younger women generally had higher levels of physical functioning (Figure 5-21), with women in the 1946-51 cohort showing a gradual decrease in physical functioning as they age.

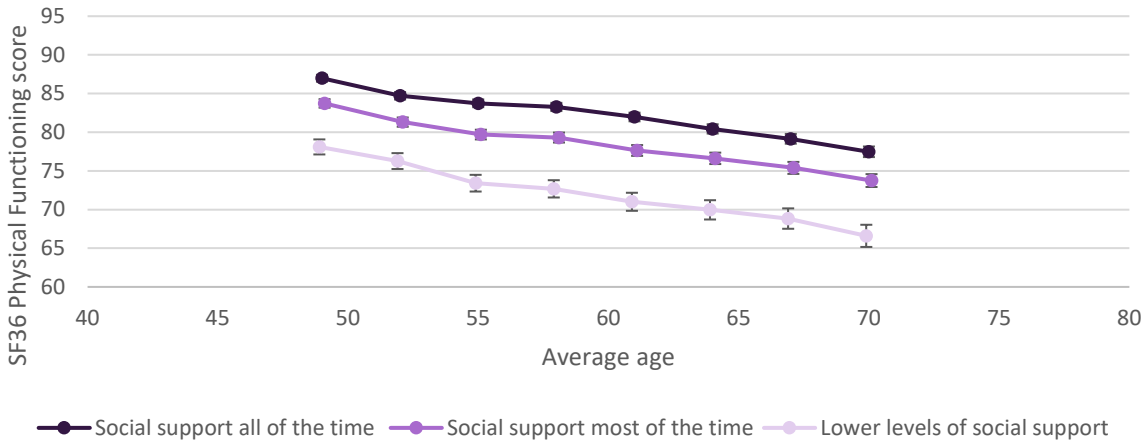

Figure 5-20: SF-36 Physical Functioning score by social support pattern across ages for women in the 1946-51 cohort.

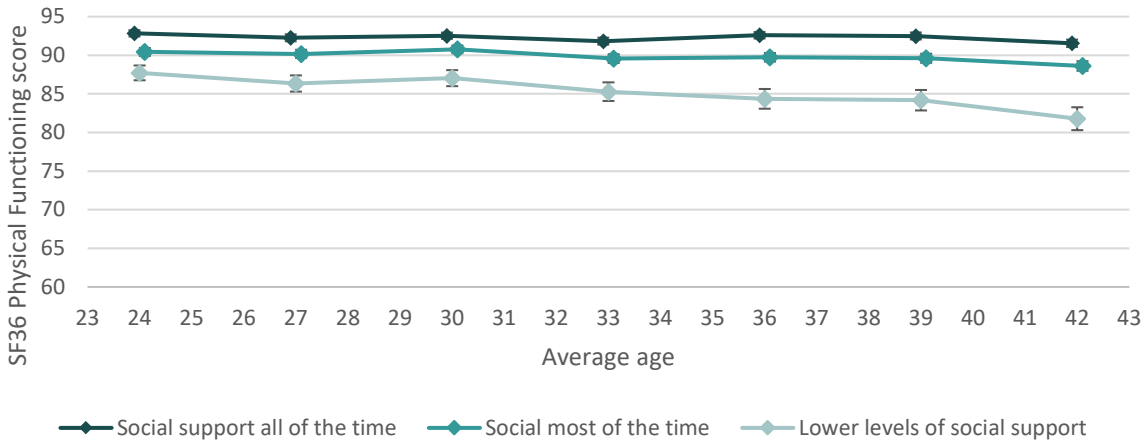

Figure 5-21: SF-36 Physical Functioning score by social support pattern across ages for women in the 1973-78 cohort.

5.5 Driving

Most women in Australia drive a car and this is their main means of transport. However, as women age many may need to relinquish their licence and find other ways of getting around. Women's ability to drive will be strongly associated with their health, with eyesight, musculoskeletal and other health problems being common reasons for stopping driving (Byles & Gallienne, 2012). The loss of transport, and sometimes more importantly, the loss of independence and identity, can in turn have impacts on women's health.

A question on driving has been included in the most recent survey (Survey 9) for the 1946-51 cohort. At this stage women mostly drive themselves.

What is your main (or most common) means of transport?	
Car (your drive)	89%
Car (someone else drives)	8%
Taxi	0%
Bus, train and / or tram	3%

As these women move through their 70s we expect some will need to give up their licence and find other forms of transport. In the 1921-26 cohort, 55% of women were driving themselves as their main means of transport when aged 76–81 years. Most of

these women continued to drive well into their 80s, with almost three in four of them still driving when aged 82–87 years. The majority of women who were non-drivers relied on another driver for their main means of transport. Very few women used taxis or other public transport. Continuing to drive was less likely if women reported diabetes, stroke, vision problems, the need for help with daily tasks, and worse scores on the SF-36 physical functioning scale (Byles & Gallienne, 2012).

5.6 Housing

Housing is fundamental to women's health and wellbeing. For younger women housing affordability can be an issue, while for older women housing suitability may be a problem if they have increasing needs for a supportive environment. In both life stages, private rental can cause financial stress and precarious housing.

Among women in the 1946-51 cohort of ALSWH, most lived in a house (77%), with around 15% living in a flat/mobile home and 5% living in some sort of retirement village or hostel (Figure 5-22).

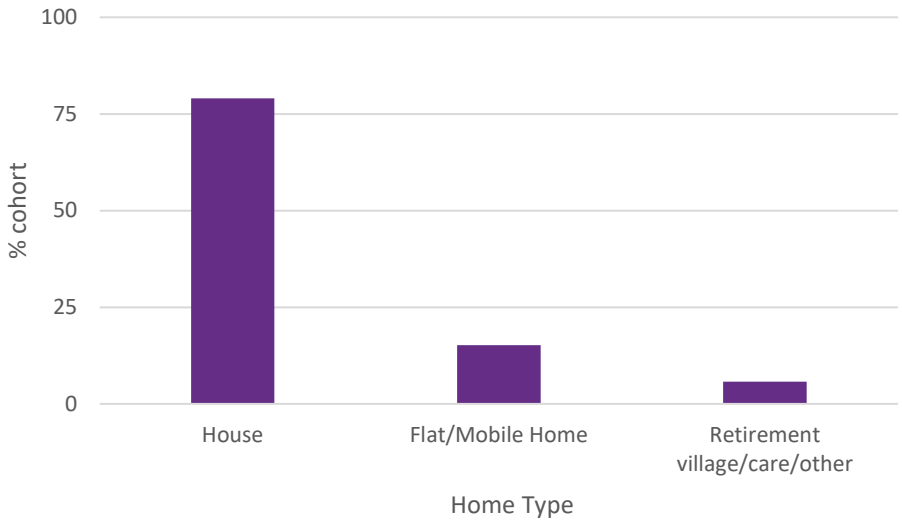

Figure 5-22: Housing type occupied by women in the 1946-51 cohort.

By their late 60s/early 70s more than 75% of women owned their own home outright, while a small percentage still had a mortgage. Around 12% were in some form of rental accommodation (Figure 5-23).

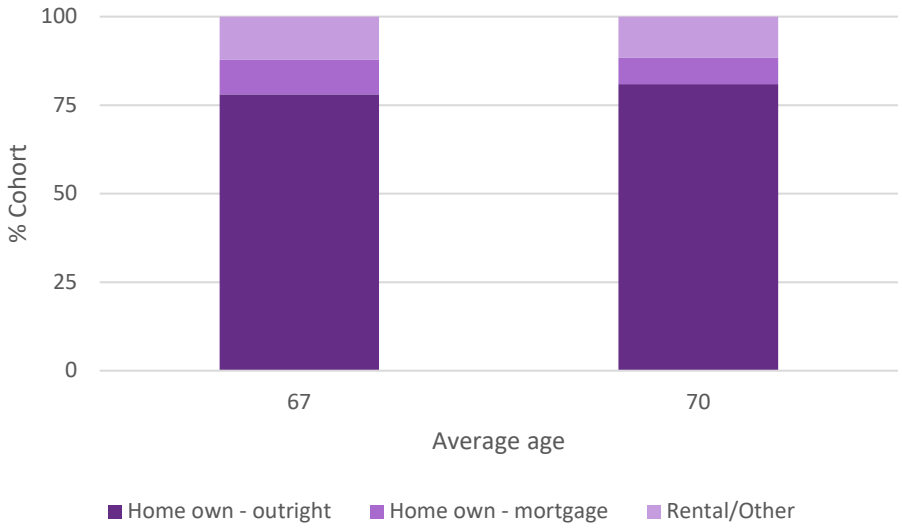

Figure 5-23: Home ownership for women in the 1946-51 cohort.

In contrast, around 25% of women in the 1973-78 cohort were renting, usually in private rental. Over time, an increasing proportion owned their own home, either with or without a mortgage. A small proportion were living with parents.

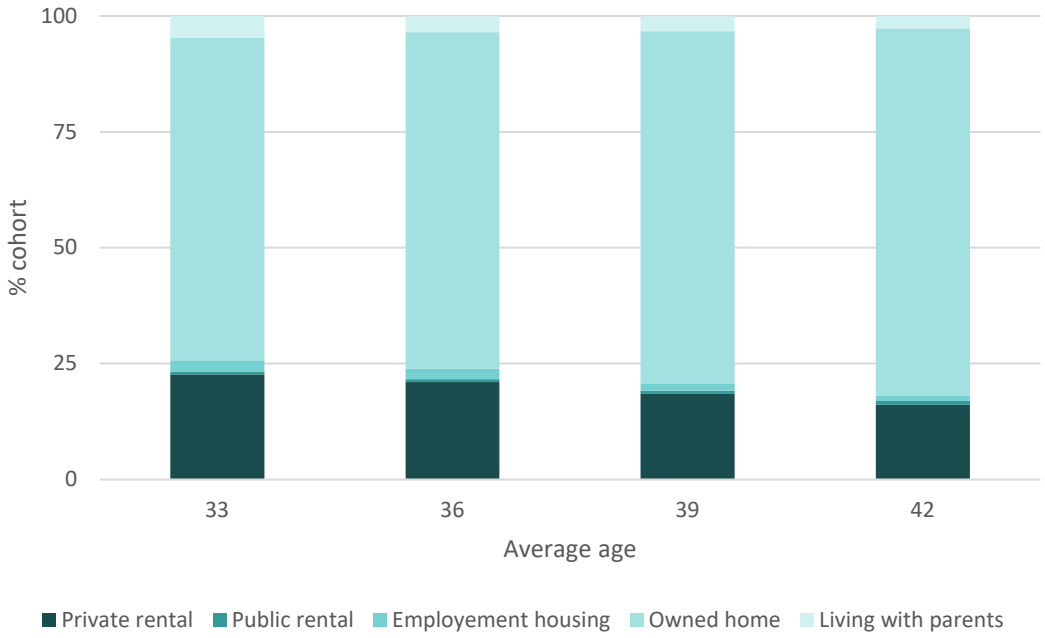

Figure 5-24: Housing situation for women in the 1973-78 cohort.

5.7 Need for help with daily tasks

Women in the 1946-51 and 1973-78 cohorts were asked in each of their ALSWH surveys whether they currently needed help to perform daily tasks. The percentage needing such help increased with age but was less than 5% even when women were in their 70s.

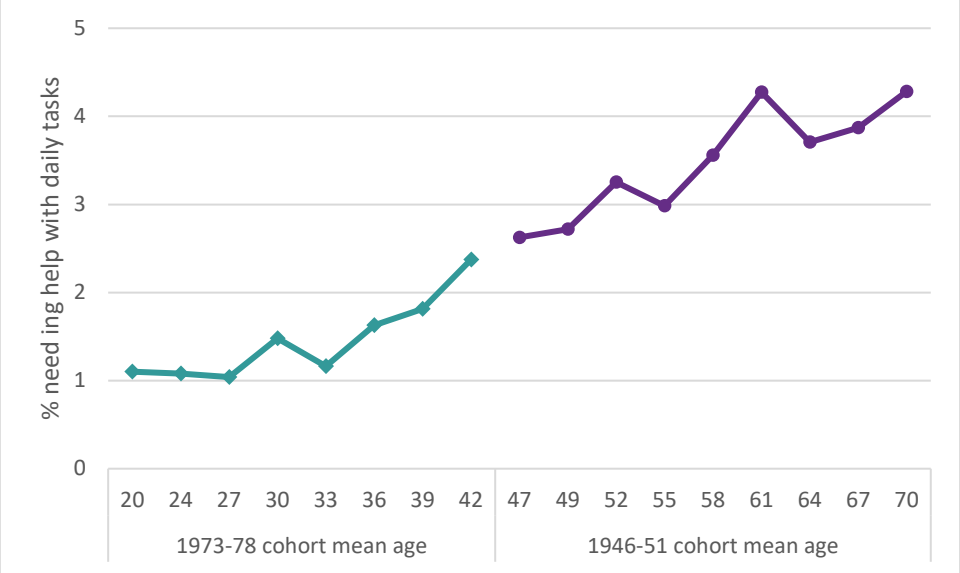

Figure 5-25: Proportions of women in the 1946-51 and 1973-78 cohorts needing help with daily tasks.

However, on each survey those who reported needing help with daily tasks had much lower mental health and physical functioning scores than those who did not need help (see Figure 5-26).

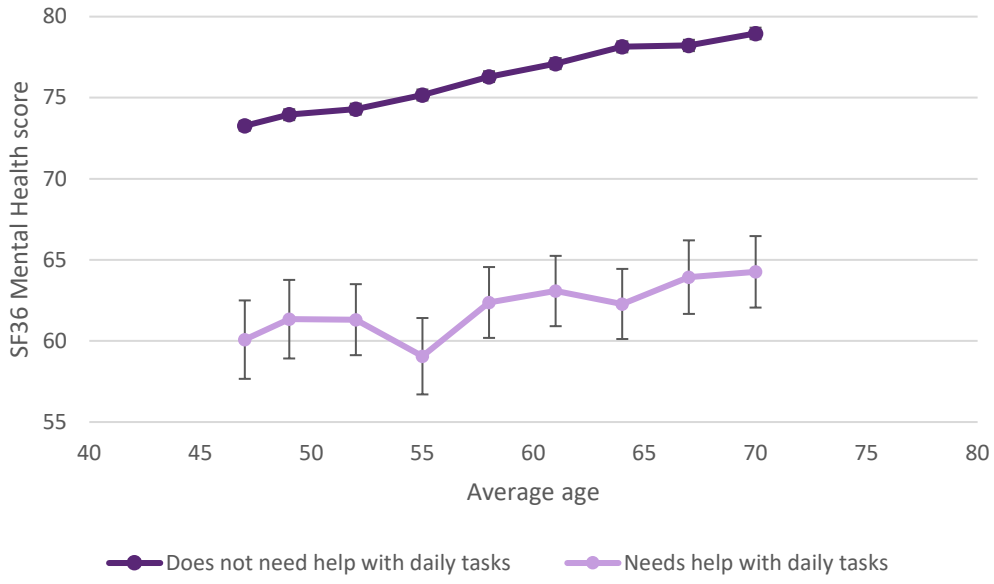

Figure 5-26: SF-36 Mental Health scores by needing help with daily tasks for women in the 1946-51 cohort.

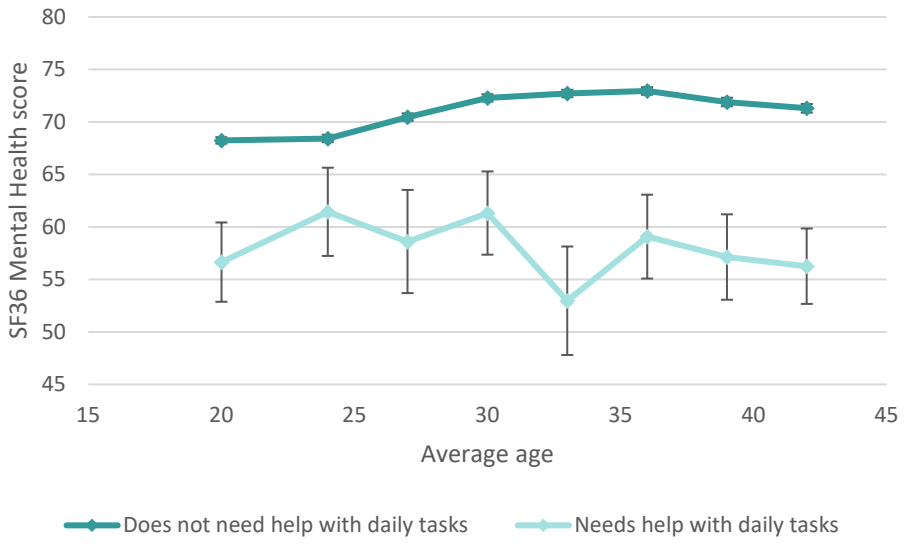

Figure 5-27: SF-36 Mental Health scores by needing help with daily tasks for women in the 1973-78 cohort.

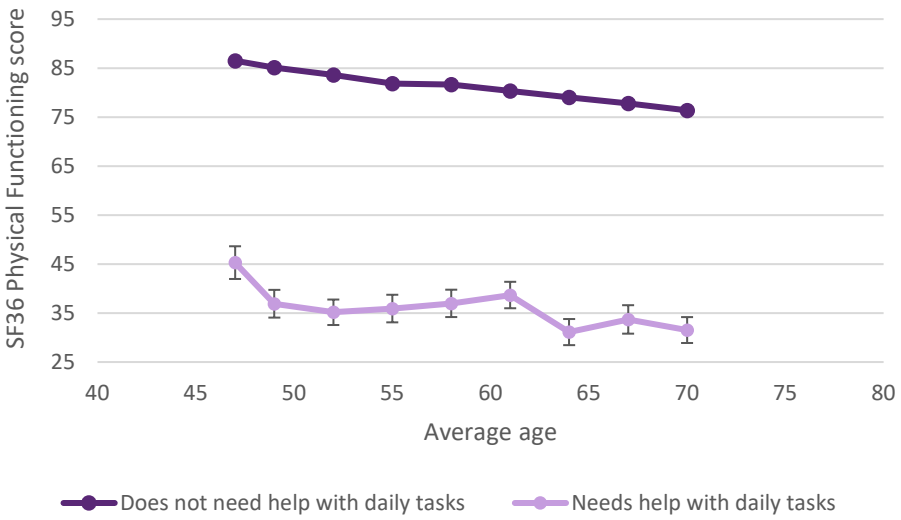

Figure 5-28: SF-36 Physical Functioning scores by needing help with daily tasks for women in the 1946-51 cohort.

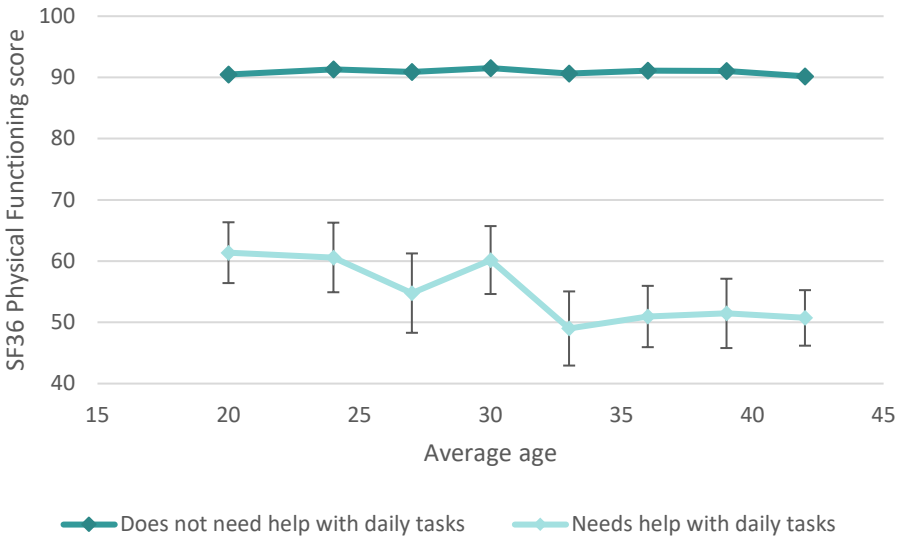

Figure 5-29: SF-36 Physical Functioning scores by needing help with daily tasks for women in the 1973-78 cohort.

5.8 Caregiving

The caregiving question(s) for both the 1972-78 and the 1946-51 cohorts are phrased as "*Do you regularly provide care or assistance (e.g., personal care, transport) to any other person because of their long-term illness, disability or frailty?*".

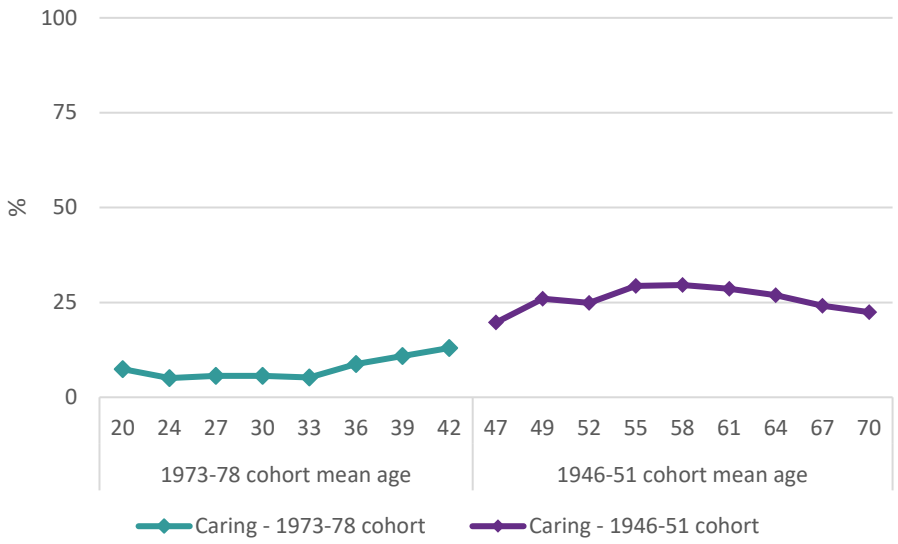

Figure 5-30: Proportion of women in the 1973-78 cohort and 1946-51 providing care to someone else.

As women moved into their 40s (1973-78 cohort) and beyond (1946-51 cohort) women were more likely to be providing care. Women in the 1946-51 cohort who provided care had slightly lower mental health scores than those who did not (Figure 5-31). This same pattern was also observed for women in the 1973-78 cohort (Figure 5-32).

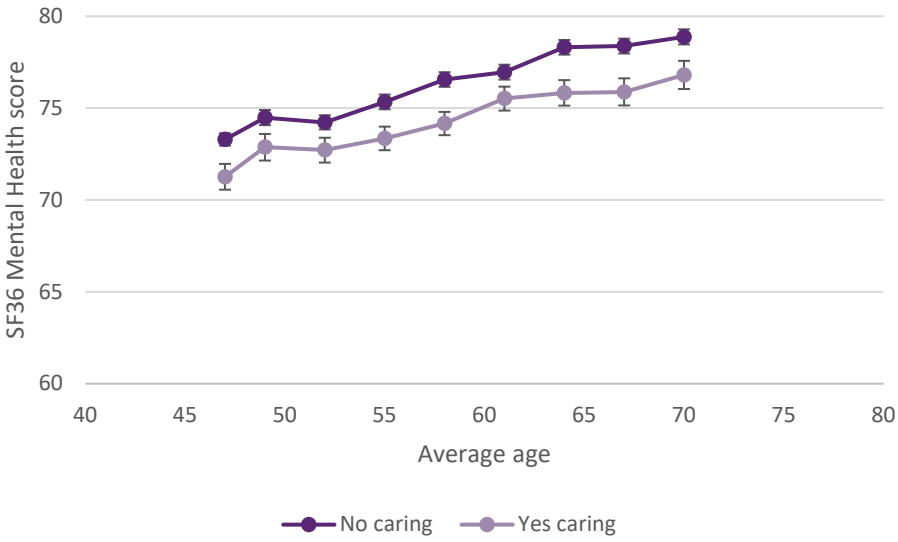

Figure 5-31: SF-36 Mental Health scores for women in the 1946-51 cohort by caring status.

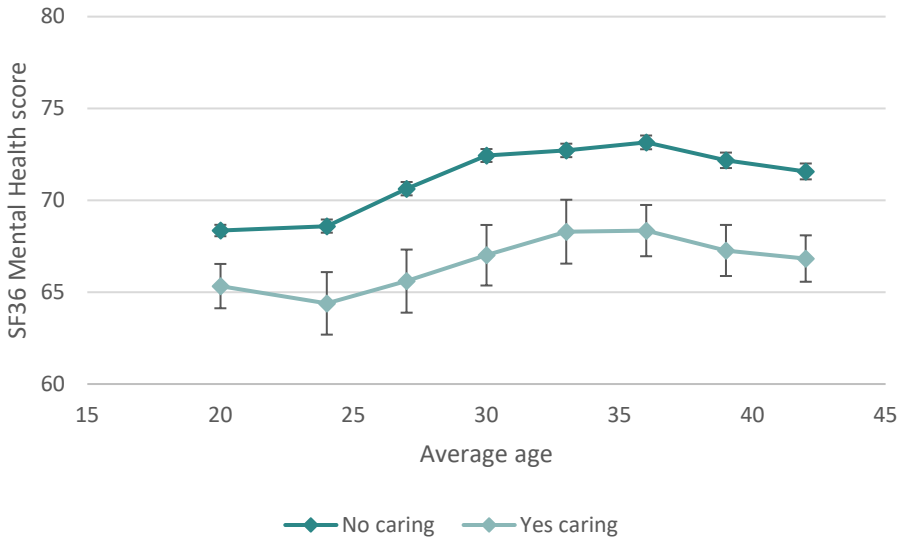

Figure 5-32: SF-36 Mental Health scores for women in the 1973-78 cohort by caring status.

In terms of physical functioning, women in the 1946-51 cohort had very similar scores between carers and non-carers (Figure 5-33). There were small differences in scores for women in the 1973-78 cohort, with women who provided care having lower scores (Figure 5-34).

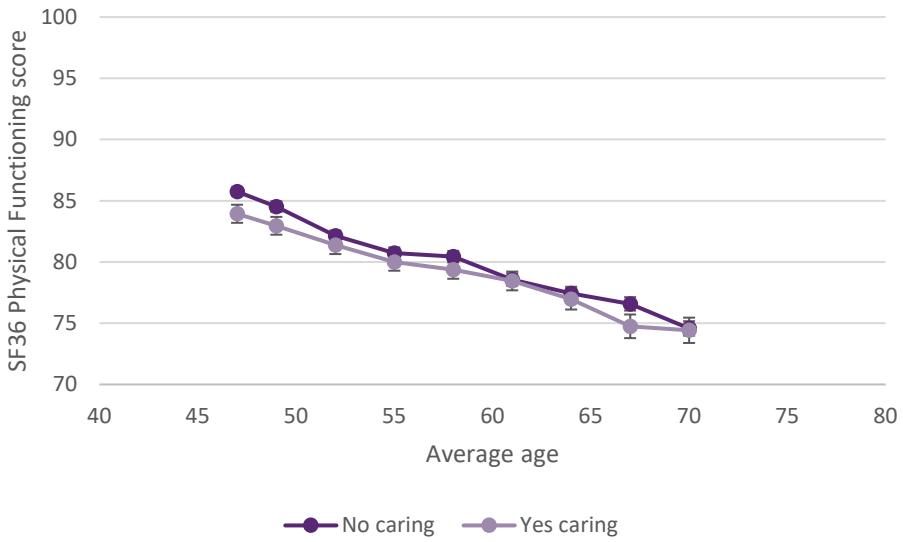

Figure 5-33: SF-36 Physical functioning scores for women in the 1946-51 cohort by caring status.

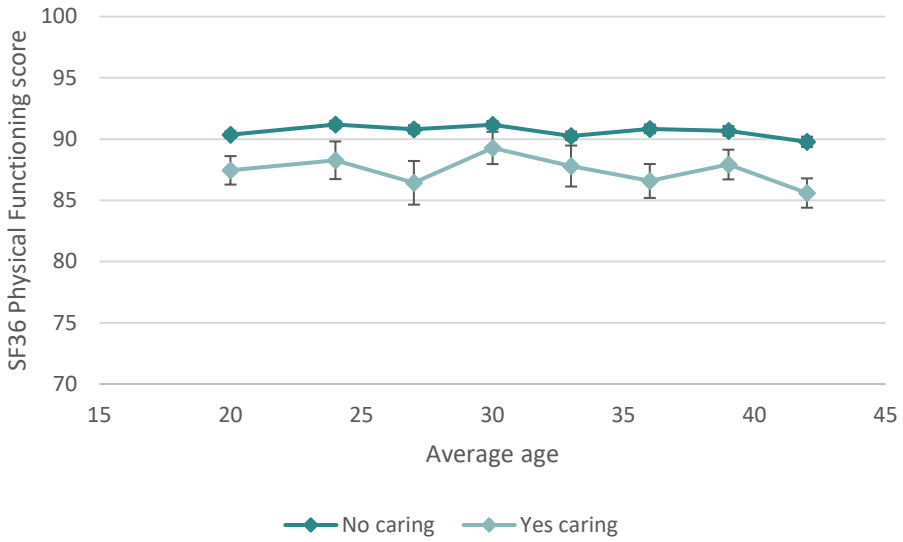

Figure 5-34: SF-36 Physical Functioning scores for women in the 1973-78 cohort by caring status.

The provision of informal care (that is, unpaid care) to another person is an important and often significant part of women's lives. In 2018 we provided a major report focusing on women's roles in providing care (Tooth et al., 2018). There was a high degree of movement into and out of caregiving over time, with only 4% of women providing care at every survey. As these women aged, the percentage who cared for someone they lived with increased, while the percentage who cared for someone they did not live with decreased after age 53 to 58 years. Of the caregivers living with the person they cared for, most were not in the labour force and had less education. Caregivers living with the person they cared for also reported more difficulty managing on their income than non-caregivers. High intensity caregiving was most often provided by women when they were aged 56 to 67 (across Surveys 5 to 7) and that this care was usually provided to a spouse/partner who lived with the women and who had a serious medical issue like a mental health condition or cancer.

Overall, women in the 1946-51 cohort who provided care for somebody who lived with them reported poorer health, health behaviours and greater health service use when compared to caregivers who did not live with the person they cared for or non-caregivers, namely, they:

- had poorer self-reported health
- were more likely to be less physically active, to smoke and be obese
- had poorer adherence to guidelines for fruit intake
- were less likely to adhere to pap test recommendations
- reported three or more chronic conditions
- had higher levels of stress, anxiety and depression
- had more visits to the general practitioner and a higher number of prescriptions filled.

Similar findings were found for women in the 1973-78 cohort. Women living with the person they cared for had poorer health and health-related behaviours, and greater use of health services than women caring for someone living elsewhere and non-caregivers. There was however no difference between caregivers and non-caregivers for specific lifestyle behaviours such as smoking, drug use, alcohol consumption and adherence to dietary guidelines.

5.9 Falls and injuries from falls

The prevalence of trips, falls and fall-related injuries was graphed for Surveys 4-9 for women in the 1946-51 cohort from their response to the question:

“In the last 12 months, have you experienced any of the following events?”

- Slipped, tripped, or stumbled?
- Had a fall to the ground?
- Been injured as a result of a fall?

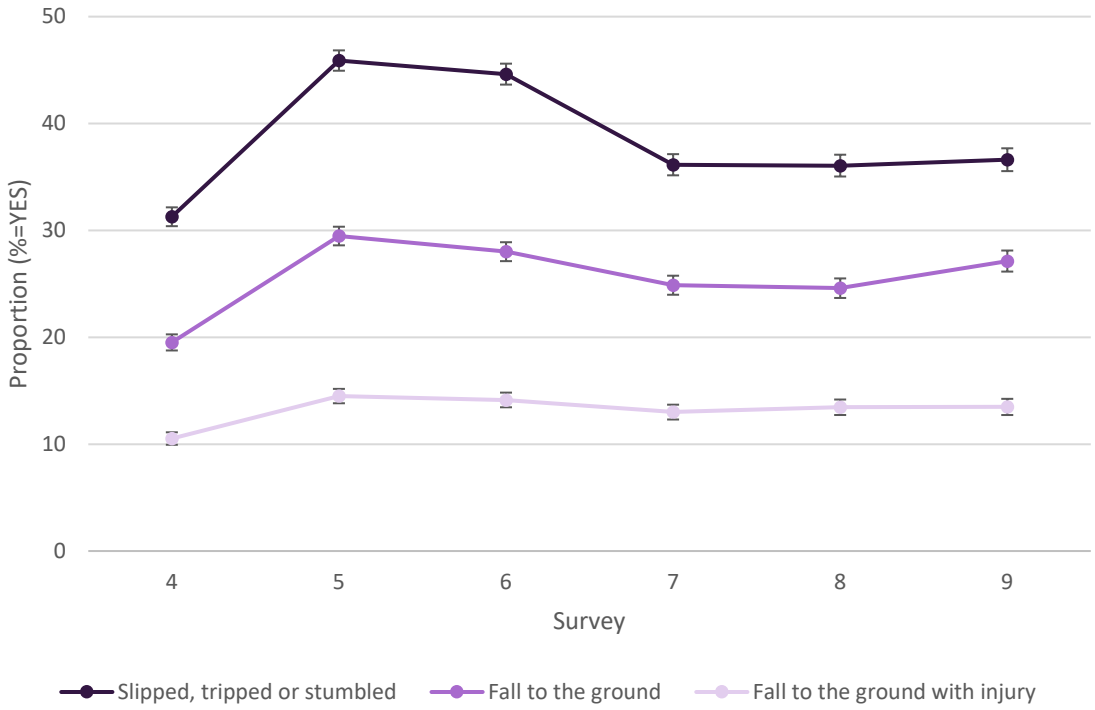

Figure 5-35: Proportion of women in the 1946-51 cohort reporting different types of falls per survey.

Around 40% of women reported slips, trips or stumbles. These common events may increase the risk of falls and falls with injury, indicating hazards, gait problems, or problems with stability. It is also important to all participants to differentiate between trips and actual falls to the ground. Many (20%) of the women reporting slips will not have reported a fall in a subsequent survey, 6% will report a fall on every survey, and the remainder (74%) will report various combinations of one or more falls.

Actual falls were reported by between 20-30% of women depending on the survey. Falls with injury were reported by just over 10% of women. We note an apparent increase in reporting of all three items for Surveys 4 and 5 compared to the other surveys. Other than this unexplained effect, there is a general trend for a slight increase in reporting of falls as women age.

To compare **short term physical and social impacts of falls**, women in the 1946-51 cohort were categorised as having experienced a fall to the ground in the last 12 months or not, at Survey 9 (aged 68-73).

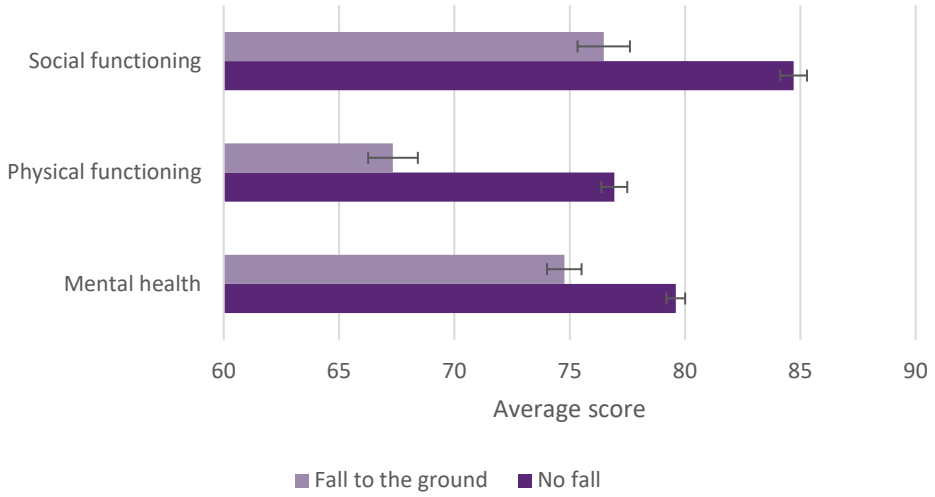

Figure 5-36: Average SF-36 scale scores in 2019 for women in the 1946-51 cohort (aged 68-73), by fall to the ground status in the last 12 months.

Women who had fallen to the ground during the previous 12 months had lower average social functioning, physical functioning, and mental health SF36 scores compared with women who had not had a fall to the ground (Figure 5-36). Women who had fallen to the ground in the last 12 months were also more likely to report that they were very/extremely stressed about different aspects of their life, particularly about their own health and money (Figure 5-37). Women who had had a fall to the ground in the last 12 months and women who had ever reported a fall to the ground with injury had a higher likelihood of using a community service for assistance with household chores (Figure 5-38).

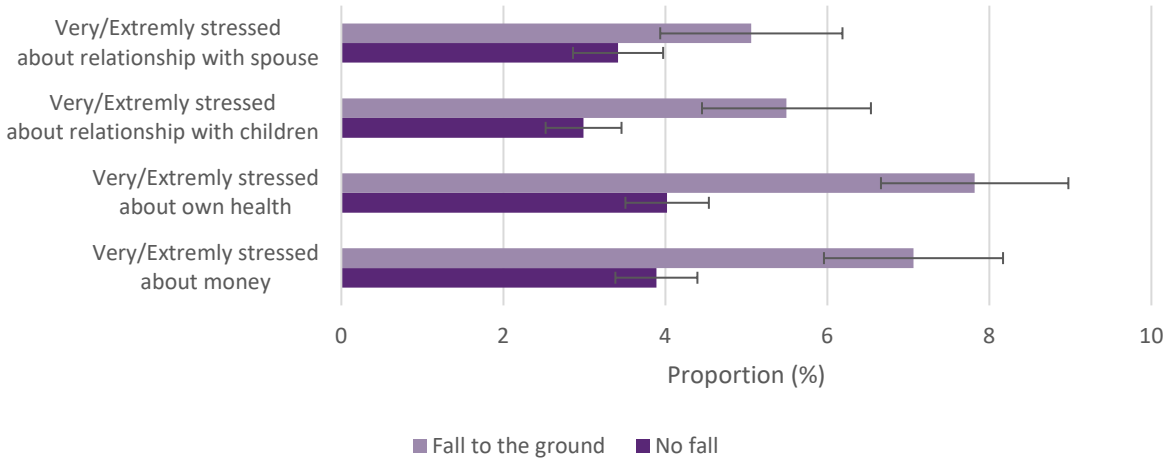

Figure 5-37: Proportion of women in the 1946-51 cohort reporting in 2019 (aged 68-73) that they were very/extremely stressed about different aspects of their life, by fall to the ground status in the last 12 months.

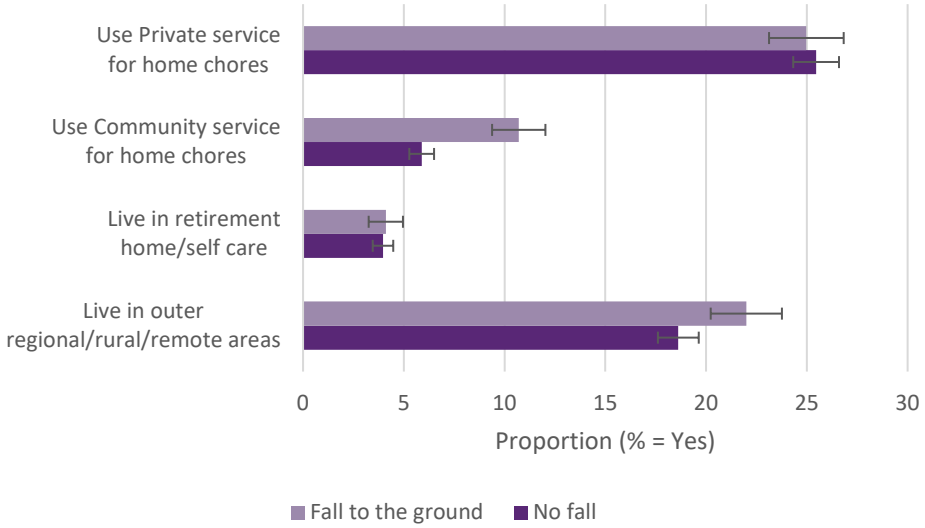

Figure 5-38: Living arrangements and use of services for home help for women in the 1946-51 cohort in 2019 (aged 68-73), by fall to the ground status in the last 12 months.

To compare the long term physical and social impacts of falls, women in the 1946-51 cohort were categorised as having ever reported a fall to the ground with an injury across Surveys 4-9 or not. Social functioning, physical functioning, mental health and stress measures for these women were then compared at Survey 9 (2019).

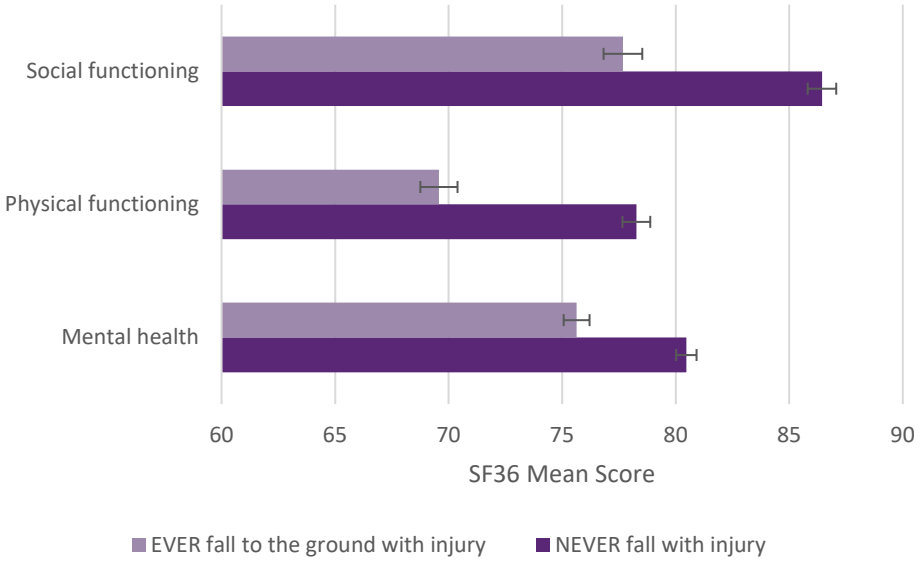

Figure 5-39: Average SF-36 scale scores in 2019 for women in the 1946-51 cohort (aged 68-73), by EVER reporting a fall to the ground with injury.

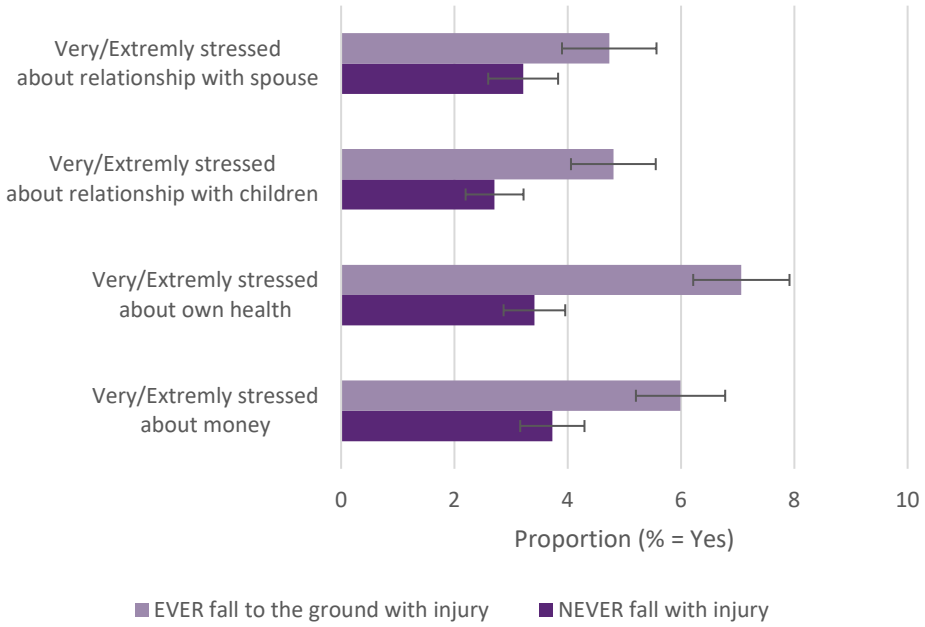

Figure 5-40: Proportion of women in the 1946-51 cohort reporting in 2019 (aged 68-73) that they were very/extremely stressed about different aspects of their life, by whether they had EVER reported a fall to the ground with injury.

Women who had ever reported a fall to the ground with an injury had lower average SF-36 scores for social functioning, physical functioning and mental health at Survey 9. These women also had a higher proportion reporting they were very/extremely stressed about different aspects of their life. In particular, more of these women were stressed about their own health and money compared to women who had never reported a fall to the ground with injury.

The proportion of women in the 1946-51 cohort reporting a specialist visit, a hospital doctor visit and 7+ GP visits in the previous year were compared between those reporting a fall to the ground at Survey 9 (aged 68-73) and those who didn't. These three proportions were also calculated for women who had ever reported a fall to the ground with injury at Surveys 4-9.

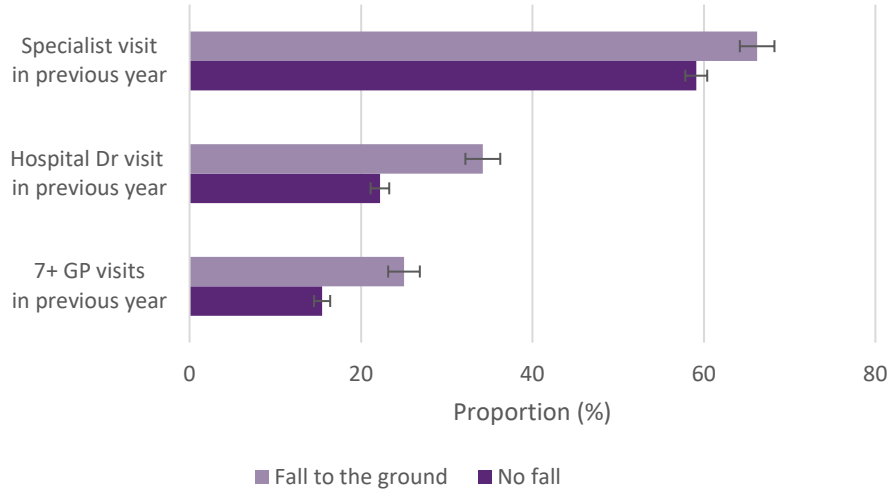

Figure 5-41: Proportion of women in the 1946-51 cohort reporting in 2019 (aged 68-73) on health service use in the previous year, by fall to the ground status.

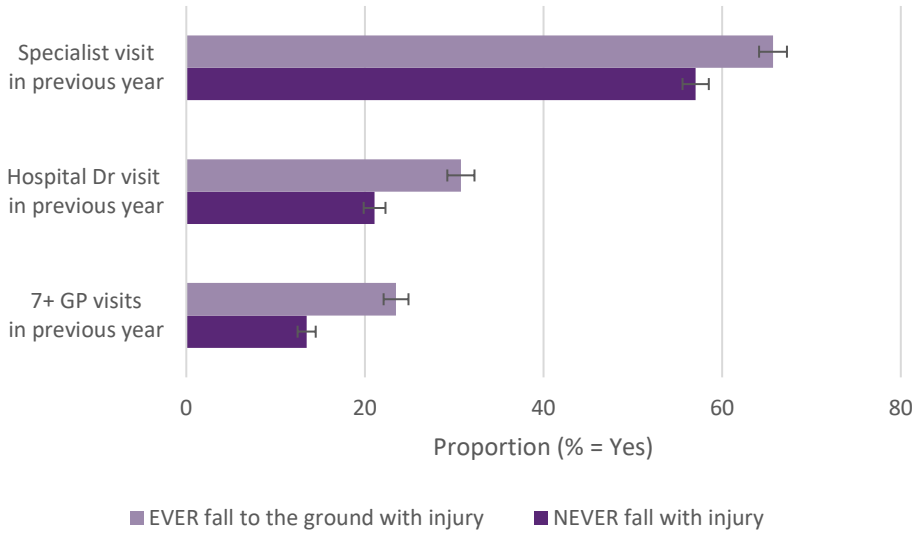

Figure 5-42: Proportion of women in the 1946-51 cohort reporting health service use in the previous year in 2019 (aged 68-73), by EVER falling to the ground with injury.

In 2019, women in the 1946-51 cohort (aged 68-73) who reported a fall to the ground in the last 12 months or who had ever reported a fall to the ground with injury had higher proportions of health service use than those women who did not report falls. For both measures of falls, women who fell were more likely to use specialists, with prevalence of specialist visits about seven percentage points higher for women who

fell (66% for those falling in the past year and 59% for those who did not report a fall). For hospital doctor visits the prevalence was around 20 percentage points higher for women who fell. Around 25% of women who reported a fall in 2019 (aged 68-73) had seven or more GP visits, compared to women who did not report a fall at that survey. Similar percentage point differences were seen for women who have ever reported a fall.

Falls are often considered to be a concern for older women. However, these findings show that falls are also common among women in later midlife. Falls at this stage of the life course suggest the need for interventions even earlier in life, with the potential to prevent falls and reduce injury and to alter the health trajectory in later life.

6. ABUSE AND VIOLENCE IN MIDLIFE

6.1 Key points

- 29% of women born 1973-78 and 26% of women born 1946-51 reported experiencing abuse during childhood.
- 25% of women born 1973-78 and 22% of women born 1946-51 reported experiencing domestic violence.
- 24% of women born 1973-78 and 19% of women born 1946-51 reported experiencing sexual violence during their lifetime.
- At age 45, 52% of women born 1973-78 reported experiencing childhood, domestic or sexual abuse compared with 36% of women born 1946-51.
- On average, women in midlife who have reported violence also experience poorer physical functioning, poorer mental health, worse social functioning, and consistently higher levels of stress.
- Among mid-aged women, use of health services (GP visits, specialist consultations, etc) was higher for women who have experienced violence, which was consistent for women aged 45 in 1996 and in 2018.

6.2 Prevalence

The prevalence of abuse and violence reported by the 1973-78 cohort was higher than that reported by the 1946-51 cohort. This included a higher percentage reporting abuse during childhood, domestic violence, and sexual violence than for women in the 1946-51 cohort at around the same age. Some of these differences may reflect changes in attitudes to reporting abuse across generations.

6.2.1 Child abuse

Overall, 29% of women in the 1973-78 cohort (when aged 37-42 in 2015) reported experiencing child abuse, which was higher than the rate of 26% reported among women in the 1946-51 cohort (when aged 65-70 in 2016). A higher percentage among the 1973-78 cohort reported childhood psychological and sexual abuse, whereas women in the 1946-51 cohort reported a higher prevalence of physical abuse (Figure 6-1). Witnessing family violence was indicated by 10% of women in the 1973-78 cohort, and by 9% of the women in the 1946-51 cohort.

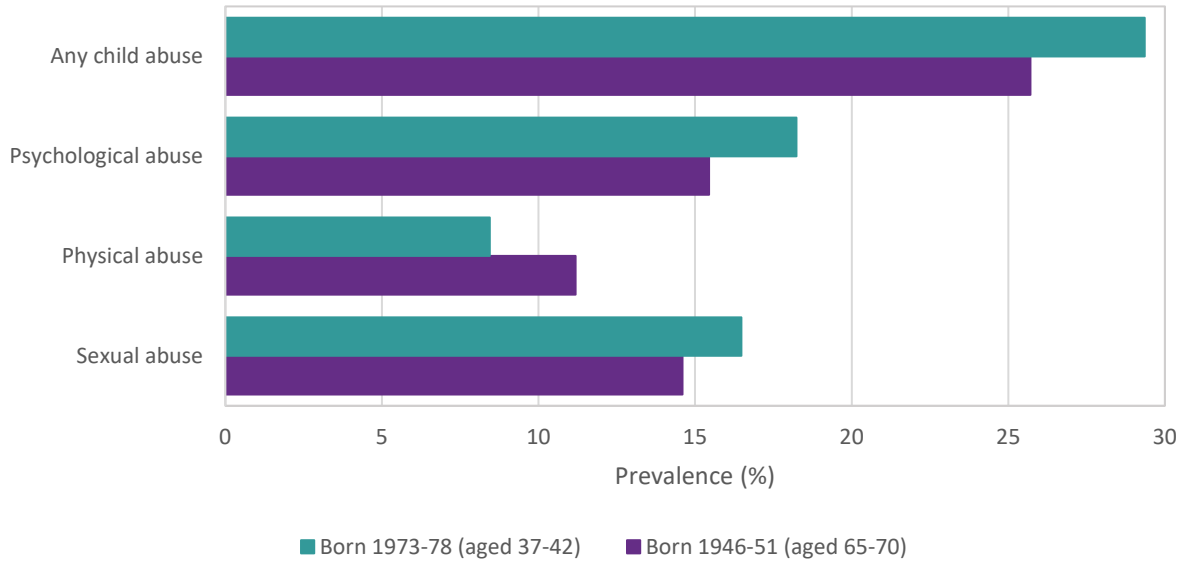

Figure 6-1: Prevalence of child abuse for women in the 1973-78 cohort (when aged 37-42 in 2015) and the 1946-51 cohort (when aged 65-70 in 2016).

6.2.2 Domestic violence (living with a violent partner)

By the time of their most recent survey, domestic violence had been reported by 25% of women aged 40-45 years in the 1973-78 cohort, and 22% of women aged 68-73 years (Figure 6-2).

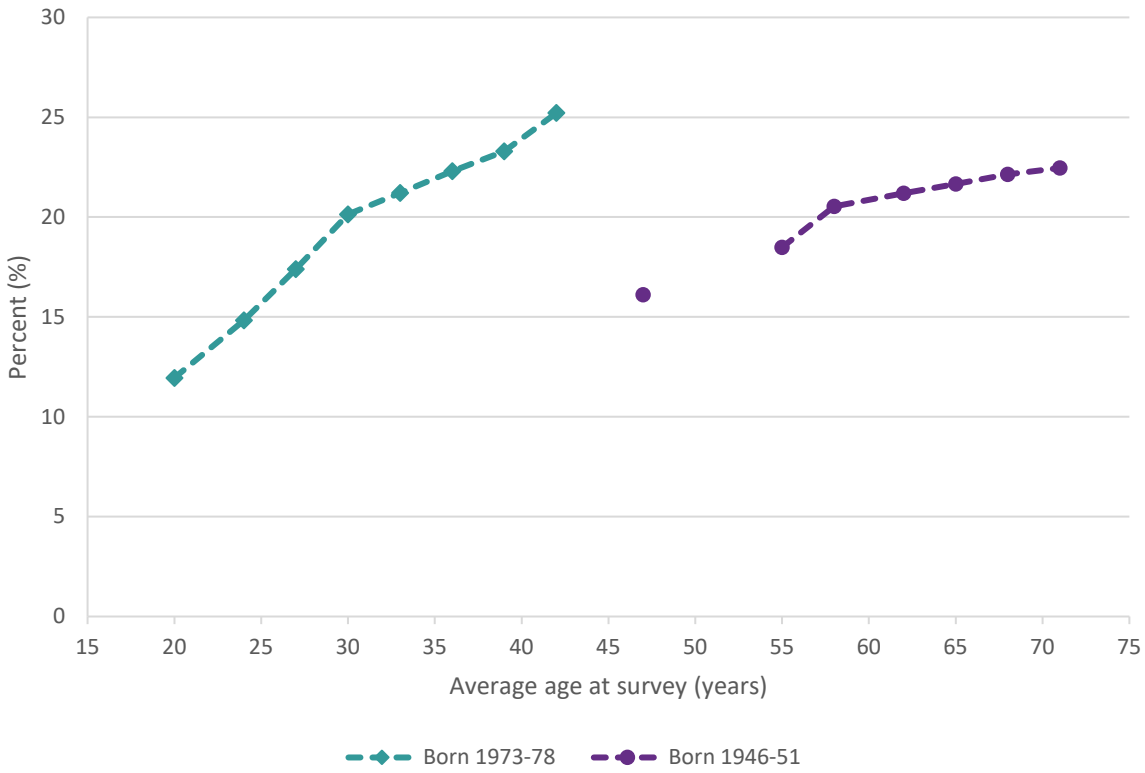

Figure 6-2: Percentage of women over time who have experienced domestic violence, among women in the 1973-78 and 1946-51 cohorts.

At the same age, domestic violence had been reported by 27.1% of women in the 1973-78 cohort who were aged 45 in 2018, compared to 13.7% of women who were aged 45 in 1996 in the 1946-51 cohorts (datapoint for this exact age not shown in the figure).

6.2.3 Sexual violence

By the time of their most recent survey, sexual violence had been reported by 24% of women in the 1973-78 cohort aged 40-45 years and 19% of the 1946-51 cohort aged 68-73 years (Figure 6-3).

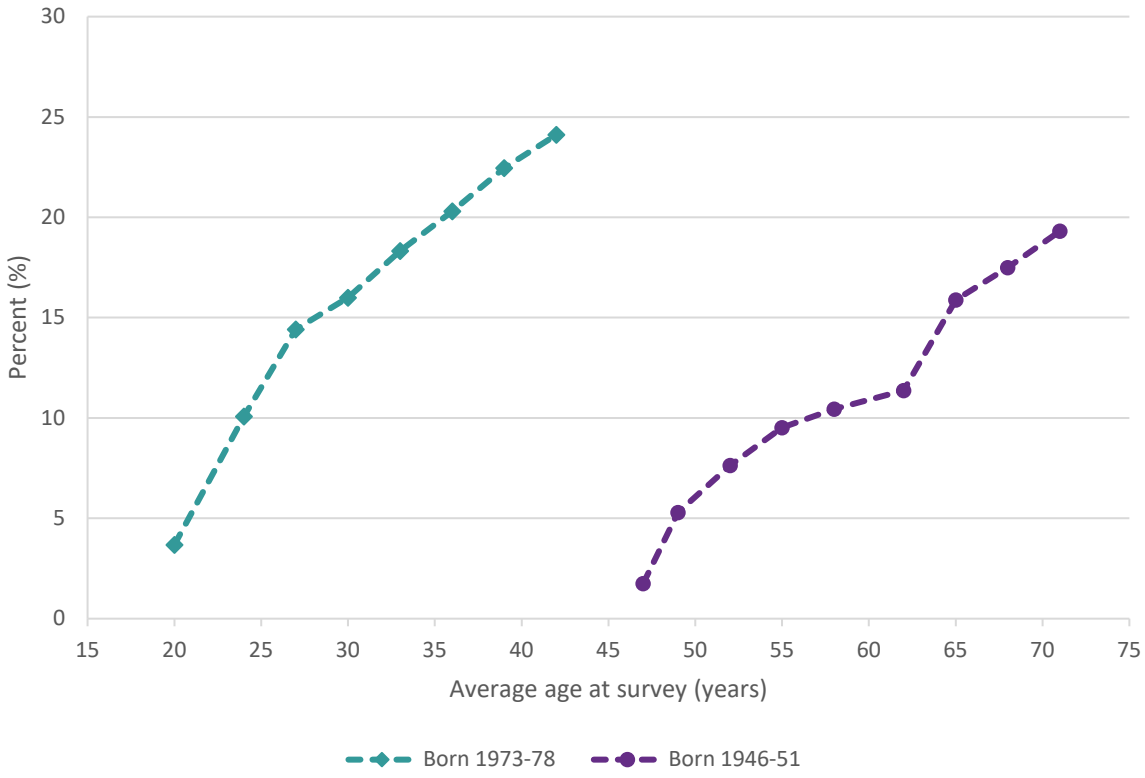

Figure 6-3: Percentage of women over time who have experienced sexual abuse, among women in the 1973-78 and 1946-51 cohorts.

For women at the same age of 45 years, sexual violence was reported by 28.1% of women in 2018 (in the 1973-78 cohort), compared to 1.7% of women in 1996 (in the 1946-51 cohort).

6.2.4 Any experience of interpersonal violence

Personal experience of any violence across their lifetime was reported by 50% of women in the 1973-78 cohort at age 40-45 years and 43% of the 1946-51 cohort aged 68-73 years, whether it was childhood abuse, violence within a relationship (domestic violence), or sexual violence (Table 6-1). Around 6% of women reported all three types of violence.

Table 6-1: Prevalence of any reported violence among women in the 1973-78 and 1946-51 cohorts*

	Born 1973-78	Born 1946-51	
	Aged 40-45 in 2018 N=5612 %	Aged 45-50 in 1996 N=8262 %	Aged 68-73 in 2017 N=7227 %
No history of violence reported	**50.3**	**65.6**	**57.2**
History of violence reported, including:	**49.7**	**34.5**	**42.8**
Childhood abuse	29.2	25.7	25.5
Domestic violence	26.2	1.2	19.4
Sexual violence	25.9	14.0	21.9

* Restricted to women who had responded to adverse childhood experience questions (child abuse) included at a later survey (2015 for the 1973-78 cohort, and 2016 for the 1946-51 cohort)

By way of direct comparison, 52% of women who were aged 45 in 2018 had reported interpersonal violence (i.e., child abuse, domestic violence, or sexual violence), compared with 36% of women who were 45 in 1996.

6.3 Health

On average, women who have reported interpersonal violence also experience poorer physical functioning, poorer mental health, worse social functioning. This was consistently observed among women aged 45 in 1996 as well as women aged 45 in 2018.

Among women aged 45 in 1996, those who had reported violence had lower social functioning scores than women with no history of violence (79.9 versus 86.5 respectively, average difference = 6.6, Figure 6-4). Twenty-two years later in 2018 for women of the same age (Figure 6-5), there was a larger difference (11.9) between those who had experienced violence (average 73.6) than for those who had no experience of violence (average 85.6).

Women aged 45 in 1996 who had reported any form of violence had lower physical functioning scores on average than women who had not experienced violence (86.4 versus 89.6 respectively). A similar difference in physical functioning score was seen for women aged 45 in 2018 (86.6 versus 89.6 respectively).

Similarly, women who had reported any form of violence had poorer mental health than women who had not experienced violence (70.6 versus 75.6 respectively). Lower mental health scores were also observed among women aged 45 in 2018 who had experienced violence (average 66.9) compared to those who had reported no violence (average 74.7).

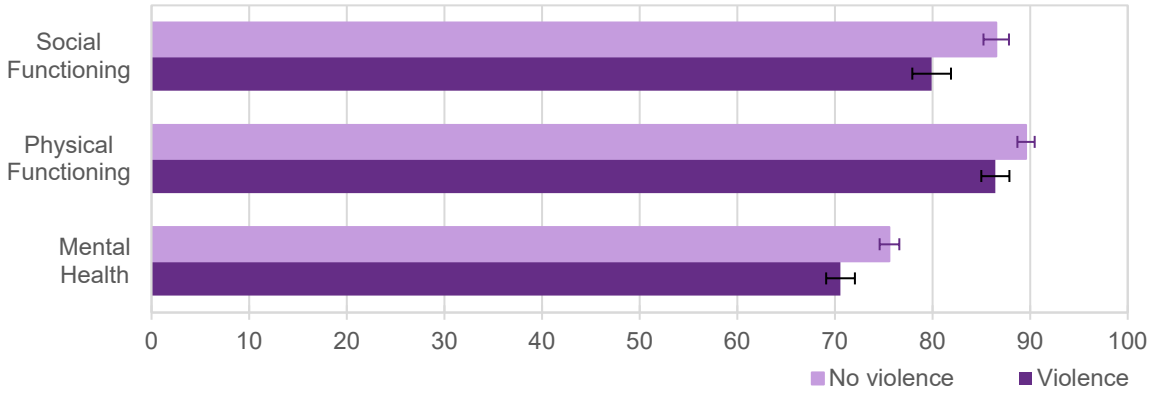

Figure 6-4: Average SF-36 scale scores for women aged 45 in 1996 (born 1946-51), according to any reported violence.

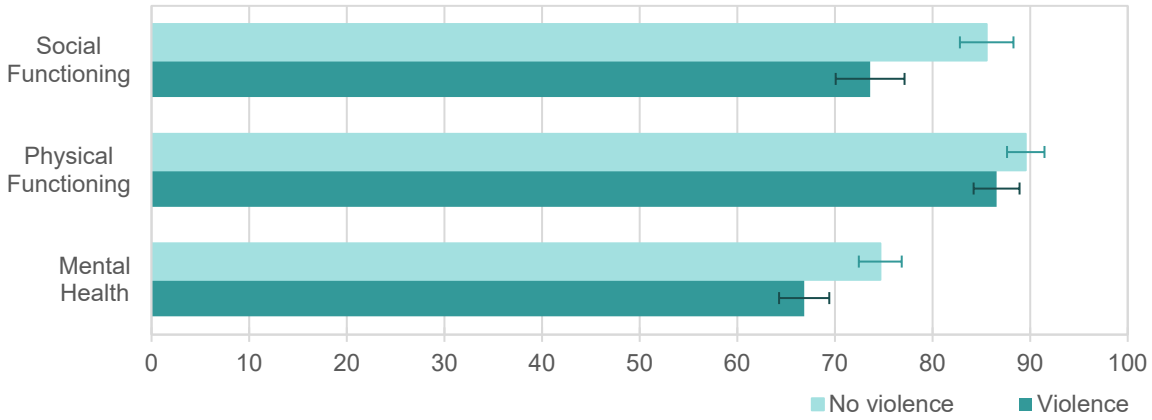

Figure 6-5: Average SF-36 scale scores for women aged 45 in 2018 (born 1973-78), according to any reported violence.

6.3.1 Stress

On average, mid-aged women who had experienced interpersonal violence reported higher stress levels than those who did not report a history of interpersonal violence (higher scores indicate higher level of stress on a range of 0 to 1). In 1996, the average stress score was 0.27 higher for women who had reported violence than those who had not (0.87 versus 0.60 respectively, Figure 6-6). In 2018, stress scores were higher

overall, although again, women who reported experiencing violence had higher stress scores than those who had not (0.93 versus 0.74 respectively, average difference 0.19).

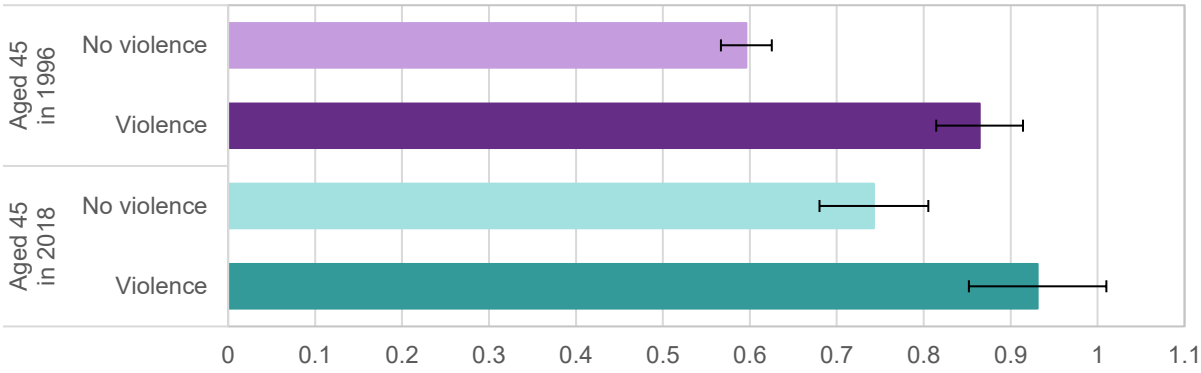

Figure 6-6: Average Stress Score for women aged 45 in 1996 and 2018, according to any form of violence.

6.4 Health service use

Among mid-aged women, use of health services was higher for women with a history of interpersonal violence, which was consistent for women aged 45 in 1996 and in 2018. Rates of health service use were higher among women aged 45 in 2018 compared to women aged 45 in 1996.

6.4.1 GP/family doctor consultations

Women with a history of violence had a higher rate of consultations with GPs or family doctors than women with no history of violence (Figure 6-7). Among women aged 45 in 1996, 16% of those who had experienced violence had seen a GP or family doctor seven times or more in the last 12 months, compared with 7% in women who had not reported violence. A similar difference was seen among women aged 45 in 2018 (18% versus 10% respectively for women who had reported violence versus no violence).

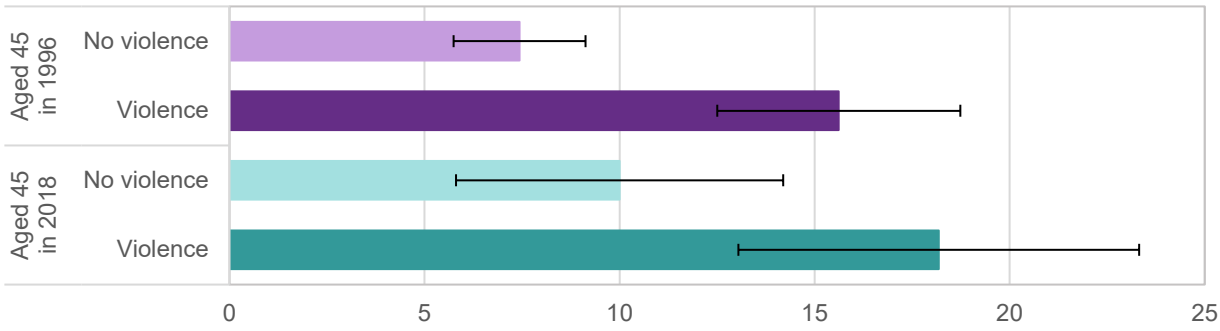

Figure 6-7: Percentage of women who consulted a GP or family doctor (7 times or more) in last 12 months among women aged 45 in 1996 and 2018, according to any form of violence.

6.4.2 Specialist consultations

Among women aged 45 in 1996, 41% of those who had experienced violence had seen a specialist doctor at least once in the last 12 months, compared with 35% in women who had not reported violence (Figure 6-8). Specialist consultations were more frequent for women aged 45 in 2018, although there were similar rates observed in 2018 between women who had experienced violence and those who had not (50% versus 52% respectively).

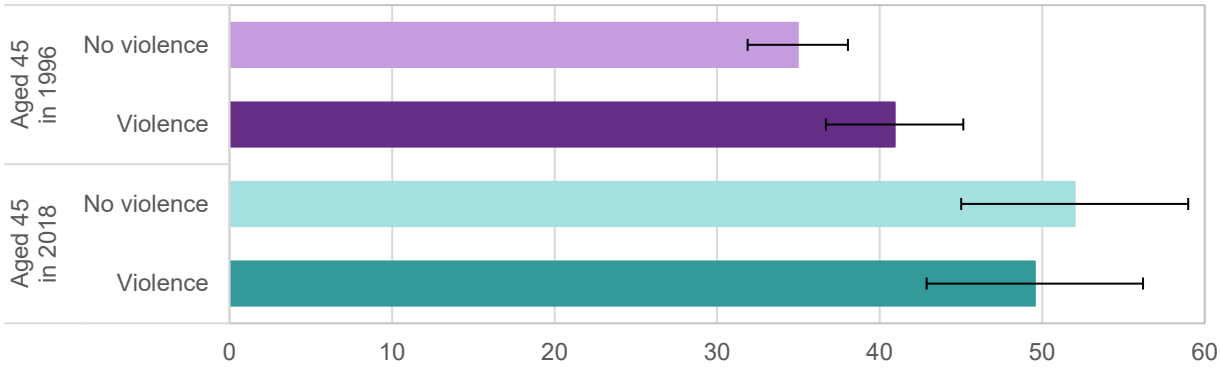

Figure 6-8: Percentage of women who consulted a specialist doctor in last 12 months among women aged 45 in 1996 and 2018, according to any form of violence.

6.4.3 Hospital doctor consultations

Women with a history of violence were more likely to have seen a hospital doctor, particularly in more recent times (Figure 6-9). Among women aged 45 in 1996, 15% of those who had experienced violence had seen a hospital doctor at least once in the last 12 months, compared with 12% in women who had not reported violence. A much

larger difference was observed for women aged 45 in 2018, where 29% of those who had experienced violence having seen a hospital doctor, compared with 18% among women who had not reported violence.

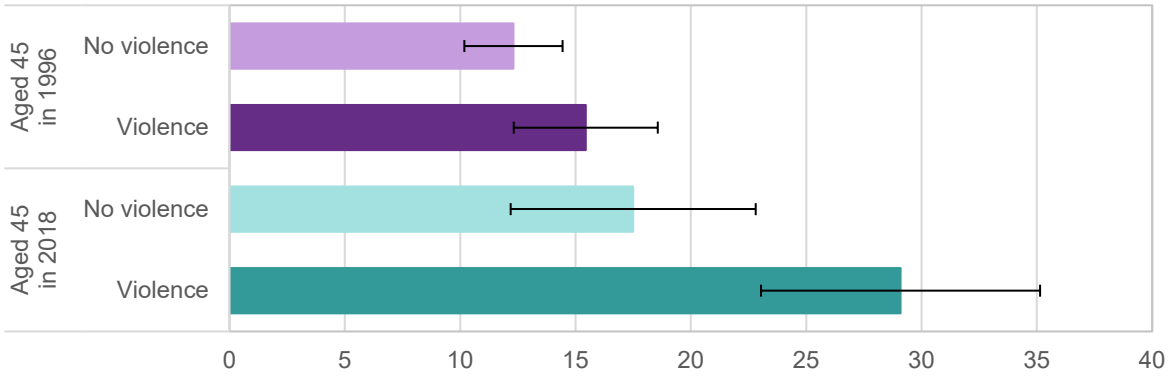

Figure 6-9: Percentage of women who consulted a hospital doctor in last 12 months among women aged 45 in 1996 and 2018, according to any form of violence.

7. THEN AND NOW: COMPARING TWO GENERATIONS OF WOMEN IN THEIR EARLY 70s

This chapter compares women in the 1946-51 cohort who were aged 70-73 in 2019 (Survey 9) with women from the 1921-26 cohort who were the same age (70-73) in 1996 (Survey 1).

7.1 Key points

- In their early 70s, women in the 1946-51 cohort generally had better scores across the domains of SF-36 Health Related Quality of Life than the older generation of women in the 1921-26 cohort at the same age. This was clear for *general health* and *vitality*, but particularly so for *physical functioning* and *role physical* (limitations in activity or participation in terms of physical functioning) and similarly for *role emotional*.
- The 1946-51 cohort were also less likely to smoke but had a higher prevalence of obesity than the 1921-26 cohort.
- Women in the 1946-51 cohort had better self-reported general health and lower prevalence across a range of symptoms, from poor memory and eyesight problems, to breathing difficulties. The exceptions were stiffness or painful joints (which were the same across cohorts) and a higher prevalence of leaking urine than in the 1921-26 cohort, which is consistent with the higher rates of obesity in the younger generation.
- The relationship with health services use by the 1946-51 cohort in their early 70s is not straightforward. These women had a higher prevalence of specialist and hospital doctor attendances, but a lower proportion with seven or more GP visits in the previous year, when compared with the 1921-26 cohort. These differences may reflect changes in the health system and policy since 1996.

7.2 Health-related quality of life

Women aged 70-73 in 2019 generally had better average SF-36 Health Related Quality of Life scores compared to those in 1996. In particular, average physical functioning and role physical scores were more than five points higher for the more recent generation.

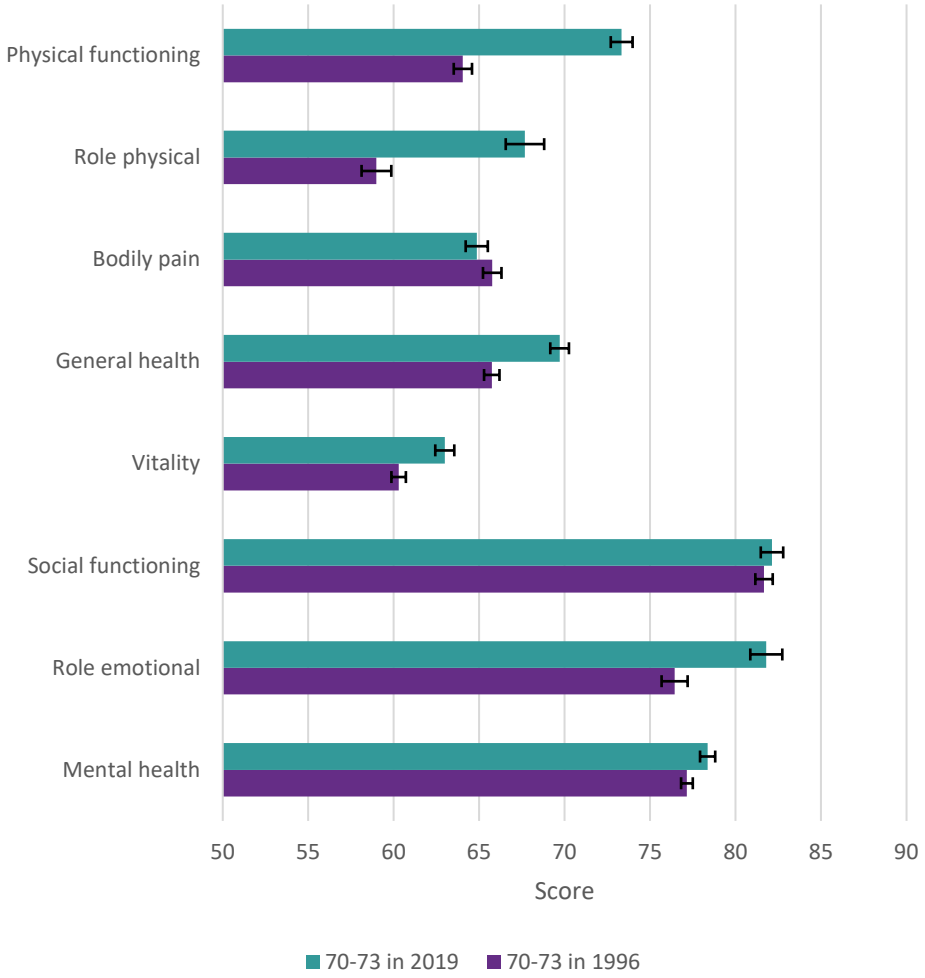

Figure 8-1: SF-36 Health Related Quality of Life scores at ages 70-73 reported by women in the 1921-26 cohort in 1996 and by women in the 1946-51 cohort in 2019.

7.3 Self-rated health and health behaviours

Women aged 70-73 in 2019 were more likely to report being in excellent/very good/good health than the women in the previous generation. The more recent generation are less likely to smoke, but more have a BMI in the obese range. Few women in either cohort were classed as risky/high risk drinkers using the 2009 NHMRC classification. The more recent generation were also more likely to report being in a violent relationship, however domestic violence data were available for Survey 1 and Surveys 4-9 for this cohort, whereas only Survey 1 data were used for the 1921-26 cohort.

Women aged 70-73 in 2019 were also more likely to report they were as healthy as anybody they know, but a similar proportion in each generation said they expect their health to get worse.

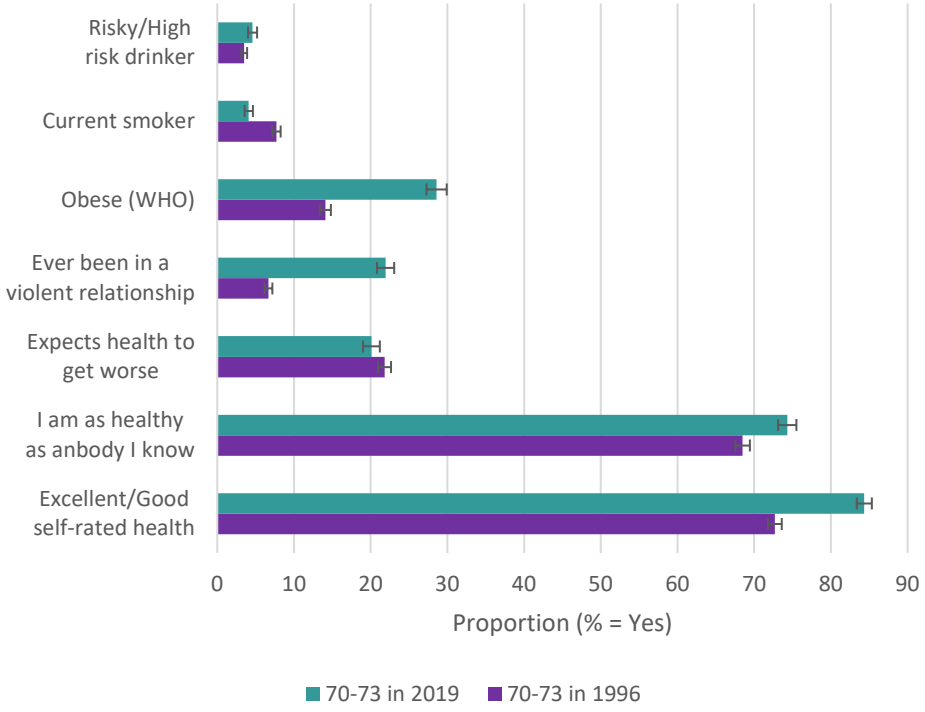

Figure 8-2: Proportion of women reporting certain health behaviours and characteristics who were aged 70-73 in 1996 and 2019.

7.4 Symptoms

Women aged 70-73 in 1996 generally had a higher proportion reporting symptoms, except for stiff or painful joints which was similar for both cohorts, and leaking urine which was more commonly reported by women in the 1946-51 cohort. The higher prevalence of urinary incontinence may be related to the higher prevalence of obesity (Byles, Millar, Sibbritt, & Chiarelli, 2009).

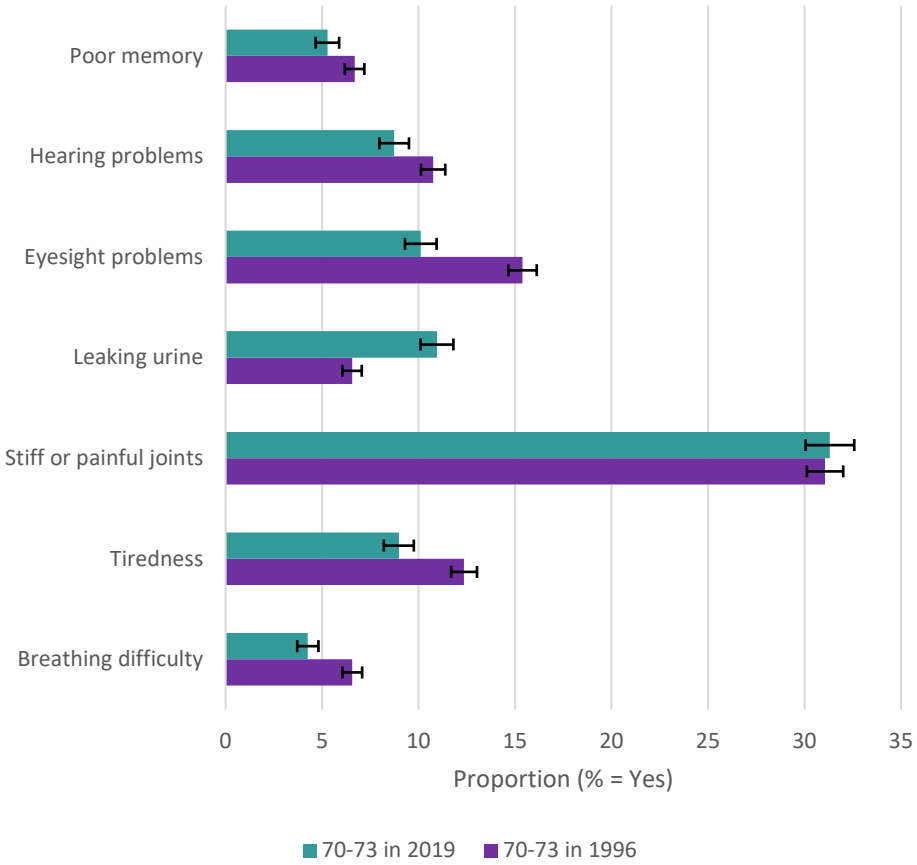

Figure 8-3: Proportion of women reporting they often experience health symptoms, for women aged 70-73 in 1996 and women of the same age in 2019.

7.5 Health service use

Women aged 70-73 in 2019 had a higher prevalence of specialist and hospital doctor attendances, but a lower proportion had seven or more GP visits in the previous year compared to women aged 70-73 in 1996.

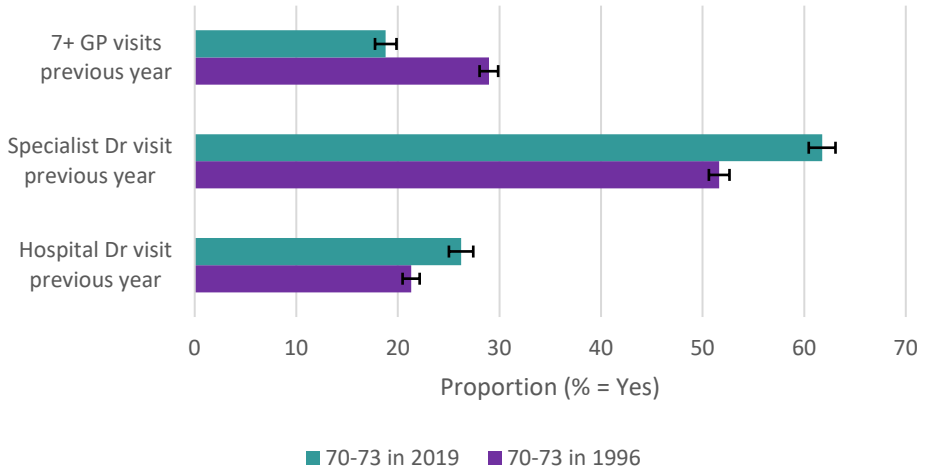

Figure 8-4: Proportion of women reporting health service use in the previous year for women who were aged 70-73 years in 1996 or in 2019.

7.6 Provision/need for care

A higher proportion of women aged 70-73 in 1996 both needed and provided regular care compared to women aged 70-73 in 2019.

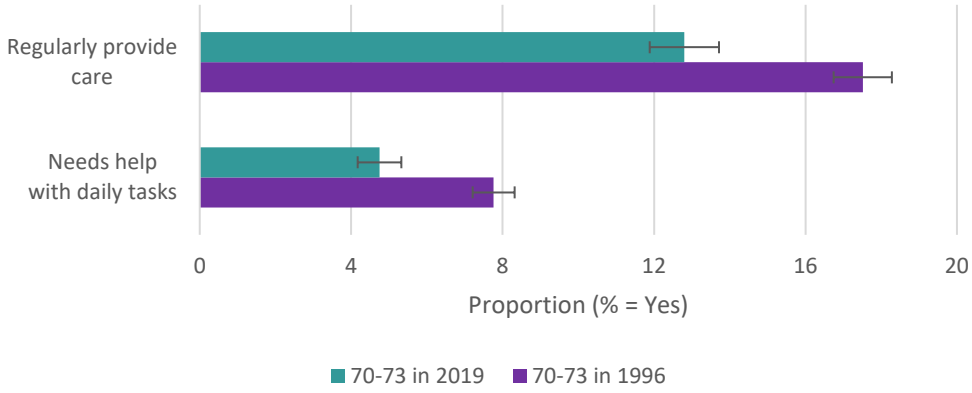

Figure 8-5: Proportion of women who provide or need care who were aged 70-73 in 1996 and 2019.

7.7 Life (dis)satisfaction

Of women aged 70-73 in 2019, a higher percentage reported dissatisfaction across all the areas measured compared with women of the same age in 1996, except for work. However, the absolute levels of dissatisfaction are low in both cohorts.

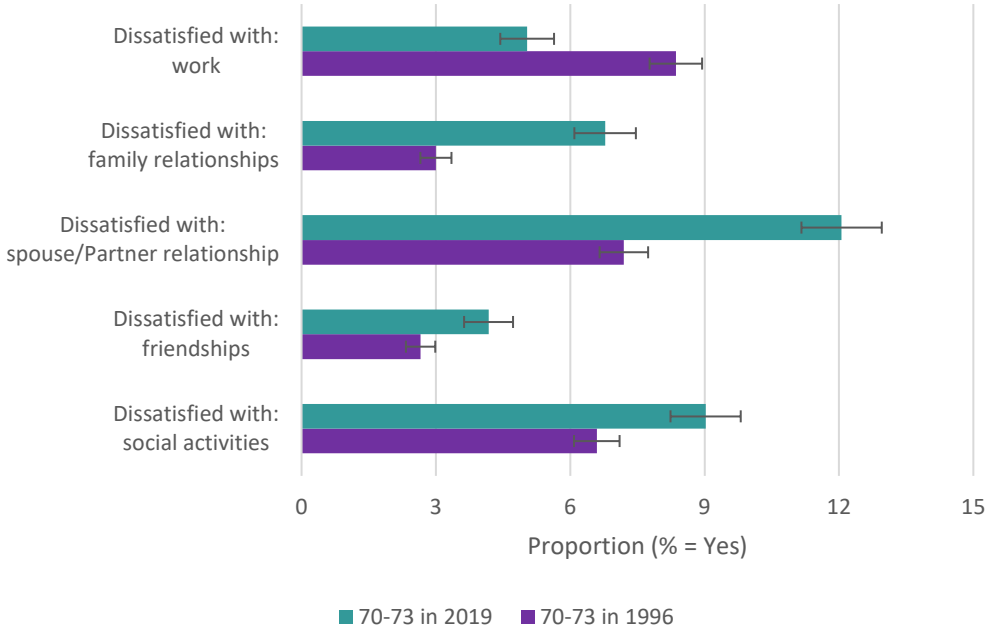

Figure 8-6: Proportion of women who were dissatisfied with certain aspects of their life who were aged 70-73 in 1996 and 2019.

7.8 Prospects for healthy ageing

Overall, the 1946-51 cohort tend to have good prospects for healthy ageing, except for an increase in the prevalence of obesity. Compared to the 1921-26 cohort, the 1946-51 cohort have better education, lower rates of smoking, and tend to be more physically active. This will stand the women well as they age, increasing both total life expectancy (TLE) and disability free life expectancy (DFLE). In a recent analysis of projected life-expectancies for the 1946-51 cohort, co-occurrence of three unhealthy lifestyle risk factors (being a smoker, obese, and not doing exercise) reduced TLE by almost nine years of life ($p<0.01$) and DFLE by 9.7 years ($p<0.01$) compared to women who were non-smokers, non-obese and who exercised. Obese women in the cohort were almost twice as likely to develop disability than those who were not obese. Even

if non-smokers, women who were obese and who did not exercise lost around three years of TLE and three years of DFLE (Rahman & Jagger, Manuscript under review).

7.9 Impacts of Coronavirus Disease 2019 (COVID-19)

From April to November 2020, ALSWH surveyed women across Australia every two weeks, to gain insight into the effects of the COVID-19 pandemic and the public response. In 2021 we added one more survey to assess vaccine uptake and hesitancy and to catch up on the effects of the pandemic on women's lives. The "COVID-19 pause" came at an interesting time in these women's lives. For many it allowed them to take stock and work out what they enjoy and value. But others felt stress and loneliness and isolation from their families, worry and concern, and disruption of their ability to provide care. In terms of health behaviours, the women in the 1946-51 cohort, who were in their 70s, were more likely to drink less than drink more alcohol, and some improved their physical activity and diet. However, they were more likely to gain weight than to lose it, and they tended to exercise less than usual and to sit more. Also, while there was a strong focus on cooking and healthy food, women were likely to eat more food overall, including more cakes and snacks, and more take away.

The health effects of the COVID-19 pandemic will take some time to be born out. Women will need to play catch up in terms of exercise and healthy eating, screening, and management of chronic disease. When we come out of COVID, we need to ramp up our efforts to help people regain or attain healthy habits, to continue to value the things that bring life meaning, and to treasure the community, connections, and kindness created by all being in the same storm.

7.10 Looking to the next generations 1973-78 and 1989-95 cohorts: Prospects for health in midlife

Women in the 1973-78 and 1989-95 cohorts show even further improvements in smoking less and exercising more. However, each successive cohort is heavier, with higher prevalence of obesity. Women in the 1989-95 cohort are also reporting worse self-rated health and more signs of psychological distress. The COVID-19 pandemic is likely to have exacerbated these health issues for many women, with women in the younger cohorts experiencing more stress and distress, and having more negative

impacts on their health behaviours when compared with the women in their 70s. Cumulatively, these factors set off some alarms for the future of these women as they age, including their ability to continue working, the onset of diseases such as diabetes and arthritis, effects on quality of life, disability, and need for health care. The opportunity to improve the health of these women in their mid and later years starts now.

8. WOMEN'S ATTITUDES TO AGEING AND THEIR OUTLOOK AND HOPES FOR THE FUTURE IN THEIR OWN WORDS

The quantitative data in this report provide insight into the factors relating to health and wellbeing in midlife among Australian women. The qualitative analysis presented in this chapter complements these findings by considering the lived experiences of women by exploring perceptions of ageing as written by the women themselves. The chapter focusses on comments made by women in the 1946-51 cohort on their latest surveys (Survey 8 and Survey 9).

The aim of this chapter is to describe women's attitudes towards ageing.

8.1 Key Points

- *Attitudes towards health with ageing* were expressed as an anticipation of worsening health over time, attention to activities that support health, and perceptions of (both positive and negative) changes to mental health with age.
- *The experience of slowing down* that included acceptance and reflection on past experiences and achievements.
- *Loss of independence and reduced capability due to ageing* with views expressed on the implications and limitations, including on forming relationships and the need for support.
- *The impact of financial security on life choices and health*, including concerns about the future and managing on their income, and the difficulty of undertaking paid work, that contrasted with others who felt financially secure.
- *Life transitions and changes in purpose and identity*, including experiences of both positive adjustment to and the difficulties of coping with life events such as retirement or bereavement – ranging from a loss of purpose and social isolation, to taking on new opportunities for work, study, and caring roles with grandchildren.

8.2 Methods

8.2.1 Sampling frame

At the end of each survey, ALSWH participants are asked the free-text question "Have we missed anything? If you have anything you would like to tell us, please write on the lines (type in the box) below". The comments from Survey 8 and Survey 9 of the 1946-51 cohort were searched using the keywords: 'older', 'age', 'ageing', and 'I hope'. Participants from the 1946-51 cohort were included in the current analysis if their comments from Survey 8 and/or Survey 9 included one of the keywords. The keyword search identified 891 comments from 568 participants. These comments were then screened for relevance to the aim. A total of 239 comments from 190 participants were deemed relevant for inclusion in the analysis.

8.2.2 Analysis

The 239 free-text comments from 190 participants were thematically analysed according to the approach detailed in (Braun & Clarke, 2006). This process involved: familiarisation with the data, generating initial codes using an in vivo coding technique, searching for themes, reviewing the themes, defining and naming the themes, and documenting the analysis and findings.

The coding process was completed by one coder using QSR International's NVivo 12 qualitative data analysis software. A second coder analysed a random 10% sample of the included participants and reported no new codes. After coding was completed, themes were reviewed, defined, and named. The analysis and findings were then documented and included in this chapter.

8.3 Results

Five major themes arose from the qualitative analysis. These were: *Women's attitudes towards health as they age, Slowing down, Loss of independence and reduced capability due to ageing, The impact of financial security on life choices and health,* and *Life transitions and changes in purpose and identity.*

Although these themes are described individually, they are interrelated in various ways. This is due to the complexities of women's lives as they age, which was demonstrated by their comments. Additionally, the way in which women expressed attitudes towards ageing varied. Some women provided insight into how they felt they had aged in recent years, whereas others projected towards the future with indications of how they expected to age. Across the comments included in this analysis, an array of attitudes and feelings towards ageing were demonstrated, including unique experiences of fulfillment, gratitude, hope, fear, and concern. These are all reflected in the major themes.

8.3.1 Women's attitudes towards health as they age

Among the comments included in this analysis, women often described attitudes towards their health as they aged. This major theme included three subthemes:

- Anticipation of worsening health with age
- Activities that support health

Changes to mental health with age

Anticipation of worsening health with age

Women's comments revealed an expectation of worsening health as they aged. This was largely written about within the context of physical health, with remarks about pain and musculoskeletal conditions, however some comments reflected this idea in a broader sense of general health.

> *As I get older I expect things to hurt a bit more.*

For my age I enjoy really good health and work at physical maintenance and wellbeing but know as one ages there will be decline.

I have become more aware of the problems that may arise in the next ten or fifteen years through observing what is happening to older friends…

There was a common acceptance of the idea that deteriorating health is inevitable with age. This was demonstrated in comments describing these experiences as a 'natural' or 'normal' part of ageing.

Of course i expect my health to get worse because i'm getting older.

Most of the aches and pains I suffer I would put down to normal ageing…

My feet are worse… Also my back is gradually getting WORSE. The joys of getting older. But I consider myself lucky compared to some others.

I am 70 now and am observing the natural ageing process - a bit of arthritis here and there.

Furthermore, women's comments revealed a perceived standard or norm for their age, against which many assessed their own health. This was often reflected in positive statements about their own health, despite describing health issues.

I am quite healthy for my age - just back ache related to spinal stenosis.

Small breakdowns occurring such as foot ligament, slight hearing loss, stronger reading glasses, mild cough/reflux - but nothing major and good for my age.....

…Considering my age, I think I am doing alright.

…this is a very treatable disease and I continue to have reasonable health for my age.

This was also reflected in statements expressing gratitude for good health at their current age**.** Some women described feeling lucky or fortunate regarding their health.

> *My health is excellent for my age so at this stage all is well*

> *Age is causing some limb stiffness and a bad knee due to a lot of exercise over the years ie arthritis in feet and shoulders and neck otherwise am lucky to be pretty healthy so far.*

> *Having been diagnosed with a cancer on my tongue which was removed I now have regular specialist visits to monitor another painful lesion on my tongue which causes anxiety and worry a lot of the time. Apart from this my health probably couldn't be better at my age.*

Activities that support health

Women's comments also described an appreciation for activities that supported health. There was a perceived sense of increased awareness of the importance of these activities as women aged. For some women, this was related to expectations of worsening health or the potential for health issues in the future. These women's comments indicated an understanding of, and appreciation for, preventive behaviours.

> *As I get older I expect things to hurt a bit more so I will do what I can now and then to minimise that hurt.*

> *Similarly, I know my health will not improve significantly, although I do feel that there are many things I can do to try to stay as well as possible.*

> *I have been actively pursuing programs to help prevent falls.... ie. balance and strengthening programs as available in my community as a pro active measure to assist with keeping as healthy and strong as I can.*

Pre-diabetes a possibility, so I have decided I can reverse it - I have lost 7kg, 5 more to go and am exercising. I have some back and hip discomfort now in last 6 months which can be a bit limiting but increases my resolve to exercise - walk, yoga, pilates to stay healthy in the future.

Women spoke about exercise and fitness and explained that these activities helped them to maintain good health and/or reverse poor health. This was also related to fitness and weight loss aspirations that some women described as a focus of their future.

I do have hope that I can take off a large amount of weight and I will have a better old age outcome.

I am also devoting a good deal of every day on me time- swimming, aqua aerobics and exercises for over 55s. I want to loose weight and I hope this will take stress off joints…

I feel healthy and happy. I'm trying to be more active as I get older to maintain my health

I have just been diagnosed with type 2 diabetes but am only just over the mark so am exercising more and dieting in the hope of reversing this in the next 12 months and reducing my blood pressure when weight goes down. I am now walking three times a week with my husband and go to the gym twice a week and exercise for an hour with a good friend.

Women also described the importance of being careful and modifying certain activities to stay healthy, in recognition of changes that had occurred with age. This often included getting enough rest and being mindful of limits to physical exertion.

My age & awareness of increasing instability make me more careful in the activities I do

I make sure I have a 'nanna' nap everyday! I am certain this helps with keeping in good health!

I had a very sore hip after too many long runs and had to have a year off running… This made me realise that when you get older you have to be a bit kinder to your body as body parts, ie tendons do wear out, get thin. I have moderated my exercise in light of this and only run 1-2 times a week instead of 4 or so and not up hills.

Mindful of my ageing body I am sensible about overstraining / overdoing. I am less flexible and swift

I am more careful when gardening and moving suddenly as I have sprained/strained muscles and find being less free in movement (ease of) frustrating. I have and do yoga exercises to build my core strength so that this won't happen again easily

There was also a perception that these activities might become increasingly difficult. This related to challenges and limitations that were seen to come with ageing, which is explored further in the theme: Loss of independence and reduced capability due to ageing. Within the context of activities that support health, women expressed frustration when finding difficulty with exercising and losing weight.

I am the heaviest I have ever been, mostly through increased cake and wine intake, and temporarily decreased exercise. It seems to get more difficult as I age.

As I am getting older I get more frustrated with not being able to do what I used to be able to do. I find it harder to keep my weight down, and I also find it harder to try and lose weight.

I am over weight which concerns me as it is almost impossible to lose weight at my age.

Changes to mental health with age

This subtheme captured the mental health changes described by women in relation to ageing. Women's comments indicated varying attitudes towards their mental health and wellbeing with age, which appeared to change over time and in response to life events.

Some women spoke positively about their mental health as they aged. Many women indicated an improved mental state since transitioning to retirement, often describing a sense of relief since ceasing work, with a reduction in stress and more time to enjoy other aspects of life.

> *Almost all of my stresses have resolved since retiring from work. No more shift work, no more enormous responsibility. I can go to the toilet when I need to. I can eat meals when I'm hungry.*

> *I'm in a mostly good place these days. I love being retired! Having worked in many jobs since age 16 through to age 63, i was worn out, mentally and physically. Not having to get up at crack of dawn is still a wonderful relief to me even after 3 years of non-working. How good is this! :) I spend my days in gardening, sewing, house chores (when i feel like it) and reading all the books i've collected…*

> *Now I have retired I find I have slowed down a bit and often feel tired but I think that is because of the lack of the constant stressful environment in my last position which I had for 15 years.*

In contrast, others indicated increasing mental health burdens. These often centred around changes to women's close relationships. For example, stress and sadness in response to parents passing away, depression and loneliness as a result of partner's health issues.

> *I was caring for my elderly mother from Jan 2011 - August 2015 when she died after contracting pneumonia... We had a close relationship and the first few*

months after her death I felt very sad and lost - wondering what my life was about now.

During 2015 both my parents passed away 3 months to the day apart.I had a very hard time coming to terms with them dying so close together. My stress level was very high and I needed to seek counselling, which I did not find very helpful and felt that my world had come to an end… for the first time in my life I felt very lonely and a great sense of inner emptiness.

Unfortunately, my husband has quite advanced Alzheimer's Disease and is in a nursing home which makes me feel very depressed at times and I am finding that I am in tears quite often.

Women's comments also provided insight into the impact of financial concerns on mental health and wellbeing. A lack of financial security and worries about income management in the future were causes of stress and anxiety, which is explored further in The impact of financial security on life choices and health.

Some women who described mental health challenges also noted a reduced capacity to manage or address poor mental health issues as they aged.

I think as I age I am less able to deal with work stress. This has caused health problems e.g. gastric reflux, depression.

My husband is a vietnam veteran - PTSD. Living 24x7, can be stressful, emotionally and mentally taxing. I'm older and not as resilient as I used to be.

8.3.2 Slowing down

Women described a general sense of 'slowing down'. Some women had observed that they were not able to accomplish as much in a day at this age, while others described having less energy or feeling physically and mentally slower, compared to when they were younger.

Sometimes just feel that I am getting older and can't do everything I did when I was younger and fitter

as I'm growing older I find I can't achieve as much as I'm used to doing. Things seems to take longer

At 68yrs I am still working 6 days a week a total of 41 hours per week but I don't have much energy for anything else other than joining friends for lunch.

I do a lot of exercise mostly strenuous. 3-4 early morning rowing sessions and 2 gym sessions a week plus gardening and I have noticed my recovery now is not as fast and I am more tired at the end of the day. 3 years ago I often worked a full day up to 6-8 hours in the garden up to 4 days a week. Mostly now this is reduced to 2 -4 hours a day usually 3 to 4 days a week and I might not garden at all a couple of days a week. Guess I am aging!!

Some women highlighted a distinction between slowness resulting from health issues and slowing down due to ageing. Comments from these women attributed the slowness to age itself.

Certainly there are things that are limited now but I feel, because of age, rather than wellness. My health is fine but my age slows me down somewhat.
The changes in health relate to stamina that is reduced by age, the ability not to be able to do as much as you were used to doing and that is frustrating.
I have slowed down somewhat due to ageing

There were a range of attitudes towards the slowness that women described. Some women indicated feelings of acceptance towards not being able to do as much as this age, compared to when they were younger.

Just realising i am getting older and things start to break down even if you feel only 45 going on 68 Not much you can do about it just live to the full while you can and don't grumble.

Arthritis on my knees are playing up especially the past few weeks that prevented me from my daily walk. Had steroid injections on both knees last year which helped ease the pain. But I suppose as you become older you become more fragile and slower!

Conversely, other women's comments demonstrated optimism in recognising that they had slowed down. These women reflected on what they had achieved and experienced in their lifetimes, accepting the slowness as evidence of having lived a full life.

I don't have the energy I used to have but still get do a lot of stuff including working. I do those things without conking out but get tired quicker at the end of the day and sit down rather than doing more things in the evening. Concession to my body being older and well used over my lifetime!!

I am having difficulty coming to terms with the physical changes as I get older as my mind is still very young, however, even though I don't recall things as easily as I did once. I think it's because there is so much more information to recall it from so I don't see that as a weakness.

8.3.3 Loss of independence and reduced capability due to ageing

Women's comments provided insight into changes in capability with ageing. Some described having noticed increasing difficulty with everyday tasks and activities as they grew older.

I am finding it harder to do some things as I get older. I don't have the strength that I used to have and because of the problems with my knee from playing tennis I find it quite hard to kneel down. It is also awkward to clean the shower as I cant get down on the floor to scrub the tiles.

Arthritis on my knees are playing up especially the past few weeks that prevented me from my daily walk.

There was also a sense of feeling restricted or limited in their opportunities to fulfil desires or participate in certain activities. For some, these limitations were related to health concerns, while others attributed this to ‘old age’ in general.

> *As age advances find it hard to accept limitations.*

> *I try to walk when my feet don't hurt too much. I would like to go to the sea but it is dangerous for my skin cancer. When you get to this age there are too many 'buts' about life.*

> *my musculoskeletal body is aging much more severely than my partner's who is 5 years older... I can't even contemplate an overseas holiday or cooking dinner for a group of people because it would be beyond my physical resources. My age and health prevents me from doing things I would like to do.*

Women’s comments also revealed a limited capacity for companionship as they aged. Some women described difficulty or feeling unable to form close social connections at their age, after ending a relationship or being widowed. Others expressed a desire to adopt pets as company, alongside concerns about their ability to care for them long-term.

> *The hardest situation for me was the break up of a relationship with a partner of 4 years. At 67 I realise that there is little hope of ever having another loving relationship. I believe many women would like to have this life style. And it is not available to most of us.*

> *Lost a pet dog aged 16 years Big loss. Age stops me getting another pet A sadness here.*

> *Women like myself (widowed) are needing to talk… We keep things that go wrong to our self and nobody knows how bad it is sometimes, because we have no one to confide in.*

… wish I had someone special to share this time of my life.

This theme also captured attitudes towards loss of independence. Some women described needing more assistance as they aged, which was often related to feelings of anger and frustration. Similarly, among women looking towards the future, a fear of losing independence was observed.

I also feel that I have lost a lot of my independence and I have to rely on other people for a lot of things -- one of the main things is being dependent on people to take me to eg., see my husband, go to various appointments, if I need to go to the library etc. There are some things I can no longer do at home which also frustrates me and I feel quite angry at times.

I am unable to do much recently as my feet/ankles are dilapidated. It would be good to go to a pool to swim but I can't drive and don't want to bother my husband.

I have been a caregiver for the last 15 years, first for my husband who has now passed away and now I am caring for my 95 yr old mother. It is confronting thinking about being on the receiving end of that care as I age.... Aging and what comes with it itself is very confronting

Lots of anxiety - I think as I get older re health; fear of losing independence - work in aged care so know what could be ahead. I remain very independent.

8.3.4 The impact of financial security on life choices and health

Women's comments highlighted the impact of financial security on life choices, and its importance for health and wellbeing. This was reflected in their thoughts towards work and retirement, as they indicated their plans for these alongside hopes for, and worries about, the future.

Many women expressed concerns about their financial future. This was often due to a fear of insufficient superannuation funds and/or government benefits. Some women described feelings of stress and anxiety alongside these concerns.

it is still difficult to live with previous financial devastation going into older age and not having the time to become financially secure.

I'm trying to be pro-active in all areas of my well-being ...including planning another income (involving study), as I feel insecure financially, especially not owning a home. If anything happened to my ex, my income would drop, therefore what I could afford to rent would be affected more than now.

I have a much happier life although still stress over my financial future as my super will run out in the next five -10 years.

Others indicated difficulty in managing on their current income in retirement. Some women described costly health expenses which, in turn, had a negative impact on their mental health and wellbeing. Some women also explained that they felt a need to continue earning an income, despite a wish to cease paid work at their age.

Since joining a gym and taking exercise classes both physical and mental health has greatly improved, however gym membership fees are using too much of my pension allowance

Idiopathic pulmonary fibrosis diagnosed years ago. Medication not available Australia. brought in on compassionate grounds $515.70 every 3months. Very expensive for me on aged care pension.

Having to focus on own health due to cannot afford health care on a pension. Being on a pension causes some anxiety and depression when costs go up and unable to replace items that break down.

I would prefer to retire however due to lack of funds this is not possible

This theme also highlighted difficulties of undertaking paid work due to age. Some women described struggling to gain or maintain paid employment as an older woman.

There were also concerns about potential age discrimination among those who had been made redundant or faced continuous rejection following job applications.

> *One of the most infuriating things is being made redundant because of age and the inability to now gain employment because I was made redundant.*

> *…i would still like to work in paid work, but cannot find anything suitable so far, largely due to my age, i suspect*

> *I worked full-time in 2015 after a year 's struggle to win a position. The role was very demanding and I had to work long hours to manage, so although I'd hoped to work for two years, I had had enough after one. The experience, and the difficulty I now find to win an interview at my age, have surprised and demoralised me. Having been reasonably successful working life, and having won positions when I sought them, I did not expected this, and as a single woman with limited superannuation, I find the financial consequences concerning, but am managing them.*

> *…I still work as a CEO but am cross because once you get older you lose all benefits such as workers comp and super insurance. I enjoy my job but have to work as I have lost most of my super to an exhusband and still have a large mortgage. I have sufficient money now but worry for the future.*

Conversely, other women's comments described a positive attitude towards their financial situation as they aged. Some described feeling financially secure due to their assets or superannuation, while others indicated that they were able to manage well on their income. These women's comments revealed a sense of relief and gratitude, highlighting the importance of financial security for their wellbeing.

> *The aged pension is the best thing that happened to me. I have an income for the first time in years.*

> *I now live in my own home - for the first time in my life I no longer rent. I have not minded in the past but now as I approach 70 I am so happy to have my own*

home… And with a good superannuation pension and partial aged pension. I am feeling well and able to buy the things I need. I was [able] to buy my unit with the sale of my own family home, once mum died in 2015. I am eternally grateful for this good fortune!...

I work casually but find it is great to feel wanted by employers but free to choose what I do, So I earn some money occasionally that allows me to splurge if I want to over and above basic annuity provision which pays the no frills bills. A nice time of life. I'd like it to go on for ever!!

I'm v grateful for my blessings - my health and financial status (given that I've been on my own now for 12 yrs).

8.3.5 Life transitions and changes in purpose and identity

This theme encompassed transitions and periods of women's lives that involved change and/or required adjustment, such as retirement, being widowed, and expanding family. For some women, these periods led to a change in purpose and/or identity. Some women described a newfound purpose since retiring from paid work, finding enjoyment in volunteering, hobbies, and leisure during their spare time.

Last 6 months - adjusting to be truly 'retired' - reviewing my life with my now found freedom.

Enjoy retirement village life always social opportunities available. My volunteer work is busy, time consuming but VERY rewarding although I am getting ready to give it up as so many more activities I want to take up. Perhaps more acceptance of being retired

In contrast, other women described feelings of uncertainty about themselves during this time. One woman's comment suggested feelings of diminished personal value since ceasing paid work.

I am now 5 years into retirement but many of the things I hoped would happen have not and I feel rather purposeless, little valued

Similarly, the significant impact of losing a partner or close family member on women's identity and sense of purpose was evident. Women's experiences of this varied, with some finding motivation in taking a new direction in life, and others feeling lost and unsure about themselves in their loved one's absence.

I have adjusted reasonably well to being a widow but still grieve for my husband. I now have a part time job as a Tour Manager travelling all over Australia and the world so good things do happen and I have been lucky to find a new purpose and direction in my life

During the last year I lost my younger sister to cancer, just 18 months after we lost our mother. This has made me the oldest member of the family of my generation still living, a sobering thought. This probably spurs me on to do as many things as I can when I can, so that I continue to feel busy and living life to the full

This theme also captured the importance of family as women aged, as women described the joy brought to them by spending more time with loved ones. Expanding family seemed to prompt these thoughts, as women described new roles in caring for their grandchildren. Women often expressed a sense of gratitude and hope for the future due to their family.

On the bright side, I have been blessed with 8 Grandchildren, 7 in the last 6 years. They really do give me the desire to keep going at times!

Greater involvement with grandkids has characterised the last 3 years as the older ones needed looking after as younger ones born and other needed looking after as parents studying. That has been valuable for me as much as it has for them...this is a good chapter of lots of interpersonal relationships with grandchildren who think I'm great (bonus!)

I have met many empathetic people and become part of the 'scene' in several areas of social interest. BUT my close friends are elsewhere - and now suddenly I have 3 grandchildren to give me hope for a very bright future!

Other women described reflecting on their identity and view of themselves, describing changes in their attitudes towards their identity as they aged.

Re getting older-I am adjusting my view of myself to that of being an older person.

As a child I was heavy and reluctant to take part in sports activities. This possibly led to me being an isolated, not lonely, youngster. I now feel more active, healthier and happier than all those years ago… I am more confident in my own skin and engage in voluntary work which gives me a lot of pleasure. At last I have taken control of my life. Life is good as an older person

…My children have grown, but so have I and so have the opportunities for private study and extending self into new areas. I think this is a very important aspect of age. We are not grown at any one point - if we stop growing then something is wrong.

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