Australian Government
Australian Institute of Health and Welfare

infocus

Life and work experiences of Australians with chronic conditions

Published December 2021

This report provides a baseline snapshot of how working-age Australians (15–64 years) with chronic conditions were faring prior to 2020 and describes how their lives may have been affected by the COVID-19 pandemic. This report also includes in-depth analysis of mature-age working Australians living with chronic conditions (for the purpose of this report, mature working-age refers to people aged 45–64).

In 2017–18, nearly 1 in 2 Australians (47%) were estimated to have at least 1 or more of 10 selected chronic conditions: arthritis, asthma, back pain and problems, cancer, cardiovascular diseases, chronic obstructive pulmonary disease (COPD), diabetes, chronic kidney disease, mental and behavioural conditions, and osteoporosis (ABS 2018a).

Health outcomes among people with chronic conditions can vary depending on socioeconomic position. People with chronic conditions who live in the most advantaged socioeconomic areas are more likely to experience better health outcomes than those living in the least advantaged socioeconomic area (AIHW 2020a).

Studies have shown that area-based measures of socioeconomic status such as the Socio-Economic Indexes for Areas (SEIFA) are useful to understand socioeconomic distribution at the population level; however, they are not an accurate representation of individual socioeconomic position (Adhikari 2006; Mather et al. 2014; Walker and Becker 2005). There is limited information on how chronic condition health outcomes vary with individual socioeconomic position measures, such as employment status and income level. Therefore, this report aims to increase the knowledge of the association between individual-based measures of socioeconomic position and health status among people with chronic conditions.

Key findings

Compared with working-age Australians without chronic conditions, in 2017–18, those with chronic conditions were:

older, with 47% in the 45–64 age group compared with 29%

more likely to self-assess their health as poor, 21% compared with 5%.

Among Australians aged 45–64 with chronic conditions:

Renters and those who were living alone were more likely to have poor self-assessed health

AIHW

Data source: The National Health Survey

The National Health Survey (NHS), run by the Australian Bureau of Statistics (ABS) is a comprehensive national population survey that collects information on the health status of Australians and health-related aspects of their lifestyles. Trained interviewers conduct a face-to-face interview with the selected adult member of the household. With the exception of some physical measurements, all information in the NHS is self-reported by participants.

The analysis in this in-focus report largely draws from the NHS 2017–18 unless otherwise specified. Further details on survey design, sample population, scope, and limitations can be found in the NHS User's Guide paper from the ABS (ABS 2018b).

Definition of working-age in this report

This report refers to individuals aged 15–64 years as the 'working-age population', a definition commonly adopted in ABS reporting (ABS 2020a). This age group has been chosen as it represents the primary section of Australia's productive workforce. As there is no universal definition of the 'working-age population', the age range chosen for this article may differ from the definition of working-age used in other contexts.

Definition of chronic conditions in this report

In this report the term 'chronic conditions' includes people who reported having at least 1 of 10 selected chronic conditions: arthritis; asthma; back pain and problems; cancer; cardiovascular diseases (selected heart, stroke and vascular diseases; excluding hypertension); chronic obstructive pulmonary disease (COPD); diabetes; chronic kidney disease; mental and behavioural conditions (including mood disorders, alcohol and drug problems and dementia) and osteoporosis (ABS 2018b). These conditions were selected because they are considered long-term conditions, common, pose significant health problems, and have been the focus of ongoing national surveillance efforts (ABS 2018b; AIHW 2021). In many instances, action can be taken to prevent these conditions, making them an important focus for preventative health initiatives (Department of Health 2020a).

Definition of poor self-assessed health in this report

Survey participants were asked, '*In general would you say that your health is excellent, very good, good, fair or poor?*' in the NHS 2017–18. In this report, we describe the ratings of 'excellent', 'very good' or 'good' under the label *good self-assessed health*, and 'fair' or 'poor' under the label *poor self-assessed health*.

Profile of working-age Australians with chronic conditions

Working-age Australians (15–64 years) living with chronic conditions when compared to those without chronic conditions, in 2017–18, were:

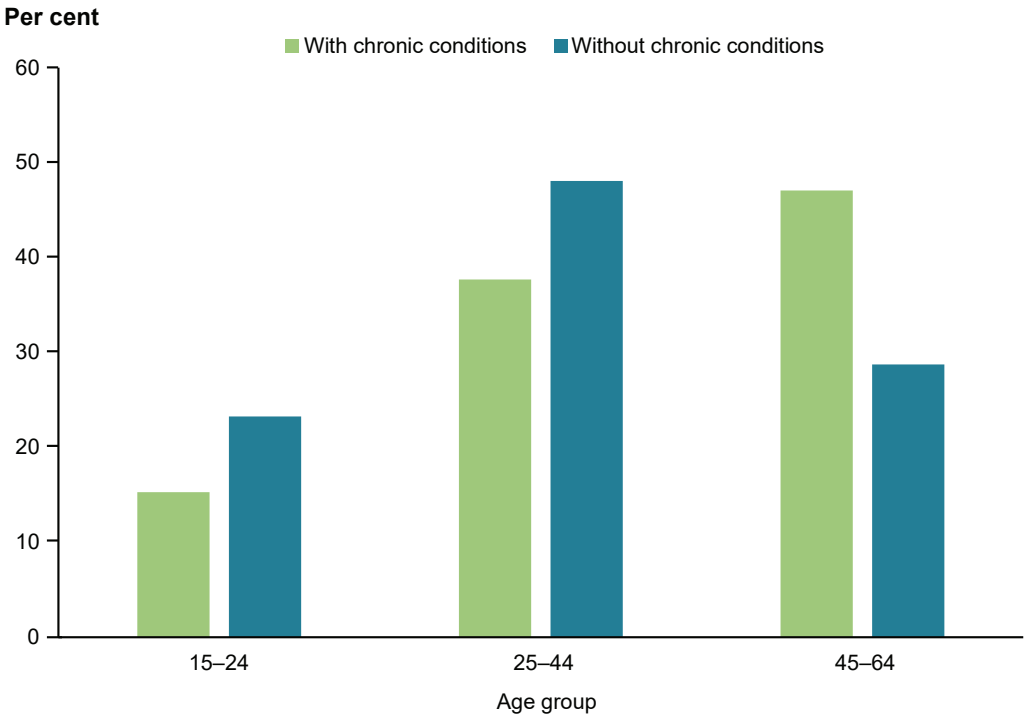
- older, with 47% in the 45–64 age group compared with 29% (Figure 1)
- more likely to be living alone, 13% compared with 8%
- more likely to live outside major city areas, 29% compared with 23%
- less likely to be employed either full-time or part-time, 71% compared with 80%
- more likely to receive a government pension or allowance, 18% compared with 7%
- more likely to self-assess their health as poor, 21% compared with 5%.

Around 2 in 3 working-age Australians had tertiary qualifications, 67% among those with chronic conditions and 68% among those without chronic conditions.

What are tertiary qualifications?

Tertiary qualifications, also called 'non-school qualifications', are awarded for educational attainments other than those of pre-primary, primary or secondary education. They include qualifications at the Postgraduate Degree level, Master Degree level, Graduate Diploma and Graduate Certificate levels, Bachelor Degree level, Advanced Diploma and Diploma levels, and Certificates I, II, III and IV levels. School level qualifications obtained through institutions other than primary and secondary schools (such as TAFE) are not included. Non-school qualifications may be attained concurrently with school qualifications (ABS 2018b).

Figure 1: Age distribution of working-age Australians living with and without chronic conditions, 2017–18



Source: AIHW analysis of ABS NHS 2017–18.

Mature working-age Australians with chronic conditions were more likely to be out of the labour force

'I was forced to retire as a registered nurse because of my limitation. I have had to accept early retirement plus have to pace my activities to be able to control my pain and mobility.'

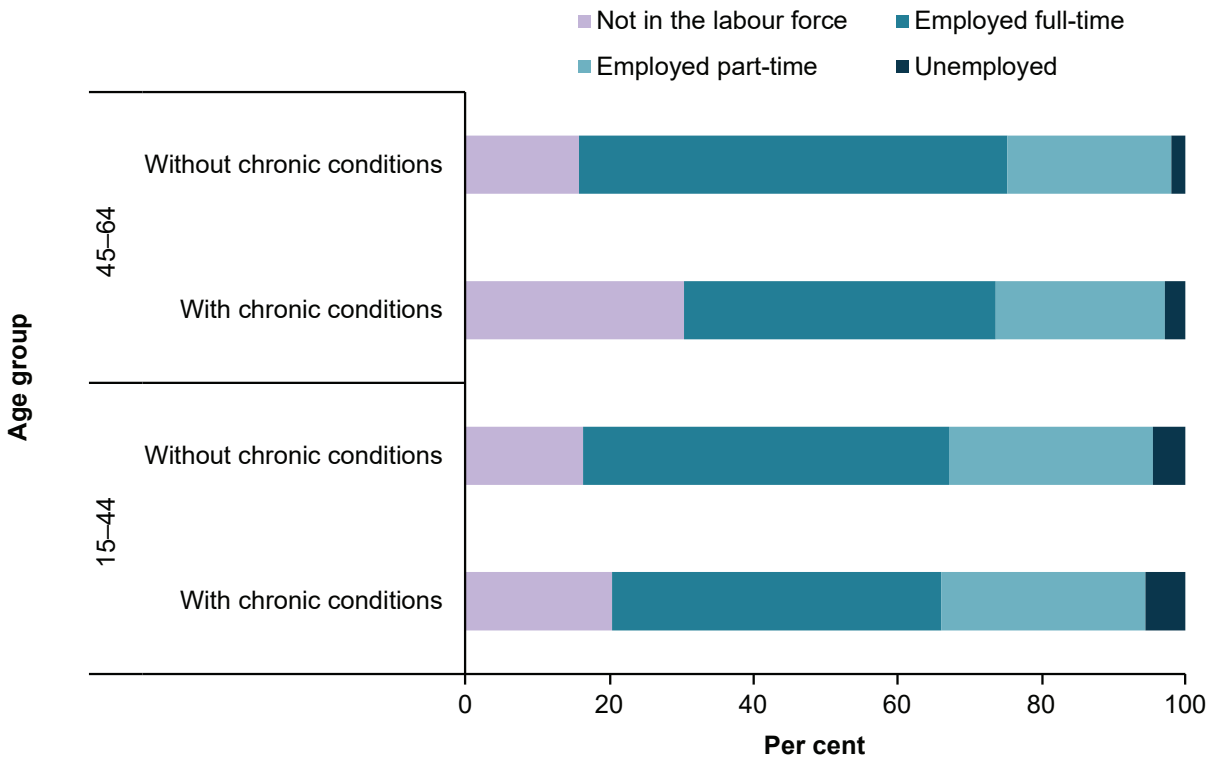
Source: Australian Longitudinal Study on Women's Health participant's experience on living with chronic conditions, Dobson et al. 2020.

When looking at the Australian working-age population (Figure 1), people with chronic conditions were more likely to be at mature working-age.

Mature working-age Australians (45–64) with chronic conditions were:

- twice as likely to be out of the labour force—30% were not in the labour force compared with 16% of those without chronic conditions. Whereas, of those 15–44, the proportions were 20% compared with 16%, respectively (Figure 2)
- less likely to be employed—67% compared with 82% of those without chronic conditions (Figure 2).

Figure 2: Employment status among working-age Australians (15–64 years) by age group and presence or absence of chronic conditions, 2017–18



Source: AIHW analysis of ABS NHS 2017–18.

Not in the labour force

Persons who are not employed or unemployed as defined, including persons who:

- are retired
- no longer work
- do not intend to work in the future
- are permanently unable to work
- have never worked and never intend to work.

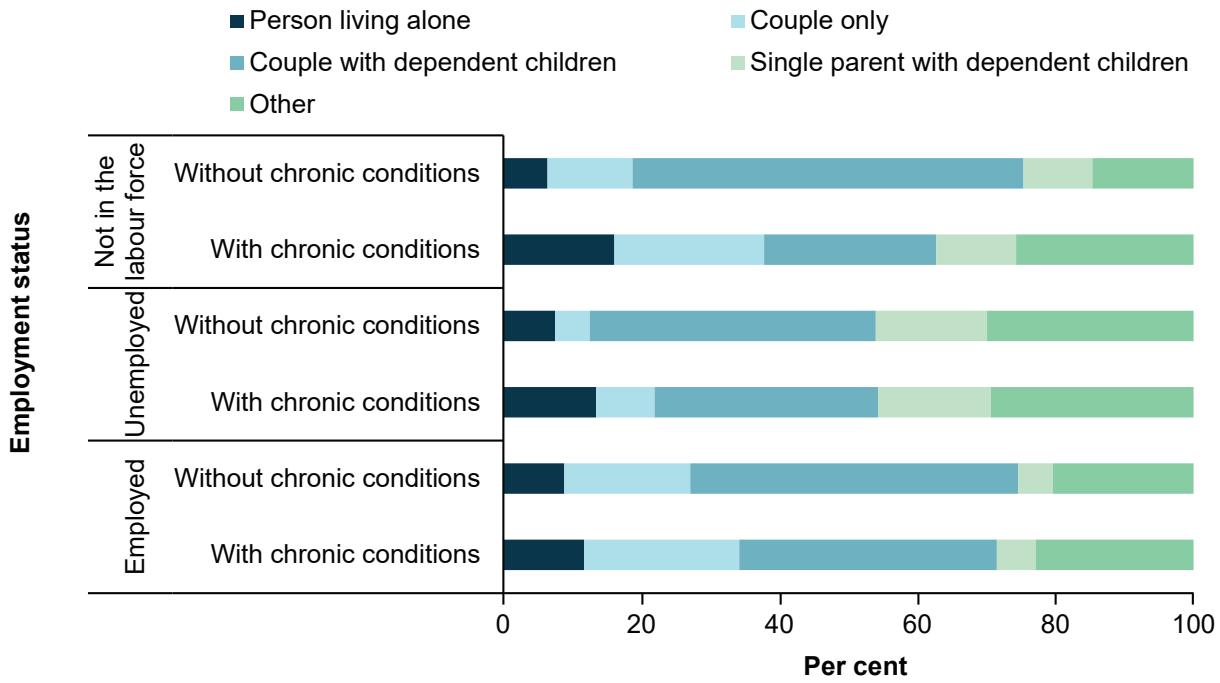
Source: ABS 2018c.

More working-age Australians with chronic conditions were living alone

Working-age Australians (15–64 years) with chronic conditions were more likely to be living on their own compared to those without chronic conditions (13% compared with 8%). When looking at those aged 15–64 who were not in the labour force, almost 1 in 6 (16%) people with chronic conditions were living alone, compared with just over 1 in 20 (6%) people without chronic conditions (Figure 3).

The number of people living alone was associated with increasing age, with only 8% of those aged 15–44 with chronic conditions reported living alone compared with 18% of those aged 45–64 with chronic conditions.

Figure 3. Family composition of households among working-age Australians (15–64 years) by employment and presence or absence of chronic conditions, 2017–18



Note: 'Other' family composition includes multiple family households, group households, and other 1-family households.
Source: AIHW analysis of ABS NHS 2017–18.

Relying on government pensions or allowances is common among working-age Australians with chronic conditions

An estimated 1 in 5 working-age Australians with chronic conditions were recipients of a government pension or allowance as their main source of income—more than the proportion of those without chronic conditions (18% compared with 7%).

Among working-age Australians who had government pensions or allowances as their main source of income, those with chronic conditions were:

- older, with 1 in 2 (49%) aged 45–64, compared with 1 in 5 (20%) of those without chronic conditions
- more likely to be living alone, with 1 in 5 (20%) living on their own, compared to 1 in 13 (7.5%) of those without chronic conditions
- living with some degree of activity limitation or disability, with 2 in 3 (67%) reporting some activity limitation, restriction or disability, compared with 12% of those without chronic conditions
- less healthy, with almost 1 in 2 (45%) assessing their health as poor, compared with 9% of those without chronic conditions.

Government pensions or allowances

This describes income support payments from the Australian Government to persons under social security and related government programs, including:

- age pension
- disability and carer payments
- underemployment and study payments
- family support payments
- other payments, such as Special Benefit, Sickness Allowance, Partner Allowance, etc.

Source: ABS 2016.

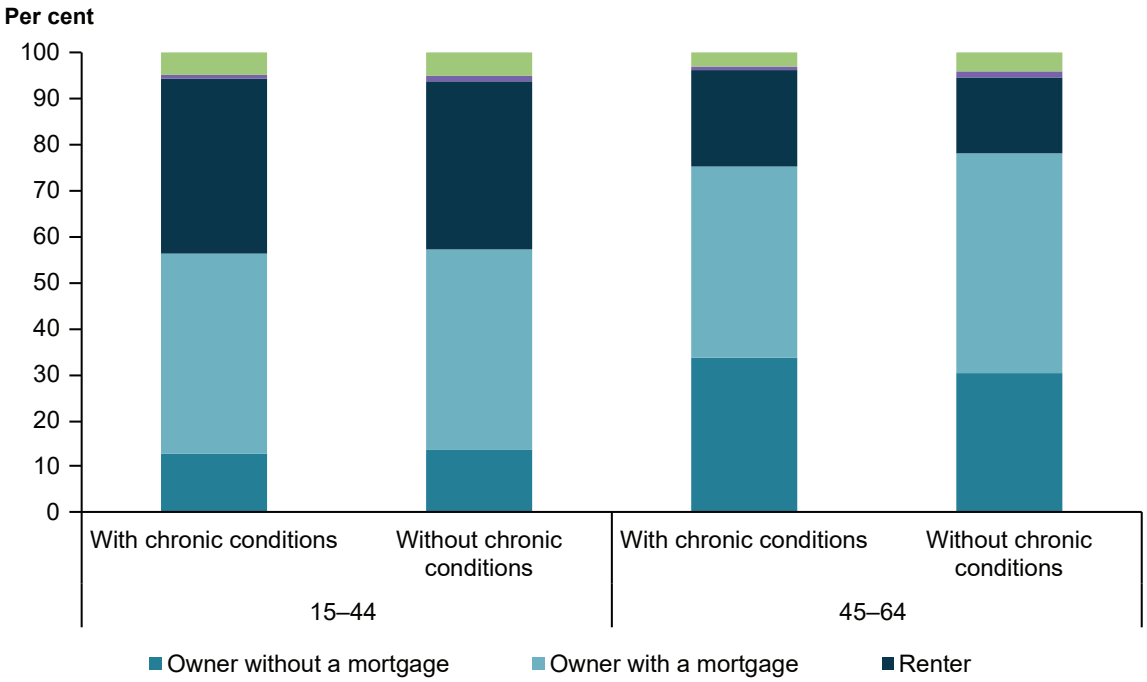
More information on type of government pensions and allowances can be found on the website of Services Australia.

Home ownership experience is different between young and mature working-age Australians with chronic conditions

Among Australians aged 15–44, there was no association between home ownership and chronic conditions. As shown in Figure 4, the distribution of home ownership status among those aged 15–44 was similar between those with and without chronic conditions.

On the other hand, there was an association between home ownership and chronic conditions among those aged 45–64. Mature working-age Australians with chronic conditions were more likely to live in rental accommodation than those without chronic conditions, 21% compared with 17% (Figure 4). Fewer mature working-age Australians with chronic conditions were home owners with a mortgage than those without chronic conditions (42% compared with 48%). The proportion of home owners without a mortgage was higher among mature working-age Australians with chronic conditions than among those without chronic conditions (34% compared with 30%), however, this difference is not statistically significant.

Figure 4. Home ownership status among working-age Australians (aged 15–64 years) by age group and presence or absence of chronic conditions, 2017–18



Source: AIHW analysis of ABS NHS 2017–18.

Mature working-age Australians with chronic conditions were less likely to have tertiary qualifications

In general, a similar proportion of working-age Australians with and without chronic conditions had tertiary qualifications (67% and 68%, respectively). However, there was an association between age, chronic condition status, and tertiary qualifications. Among those mature working-age Australians (45–64 years), fewer people with chronic conditions had tertiary qualifications compared to those without chronic conditions (66% compared with 72%). Whereas, of those aged 15–44, a similar proportion of people with and without chronic conditions had tertiary qualifications (67% and 66%, respectively).

Living and working circumstances for women with chronic conditions are different compared with men

In 2017–18, a higher proportion of those in the working-age population with chronic conditions were women compared to those without chronic conditions (53% and 48%, respectively).

Living and working circumstances for women and men in general can differ significantly, these differences were also seen among women and men living with chronic conditions. In 2017–18:

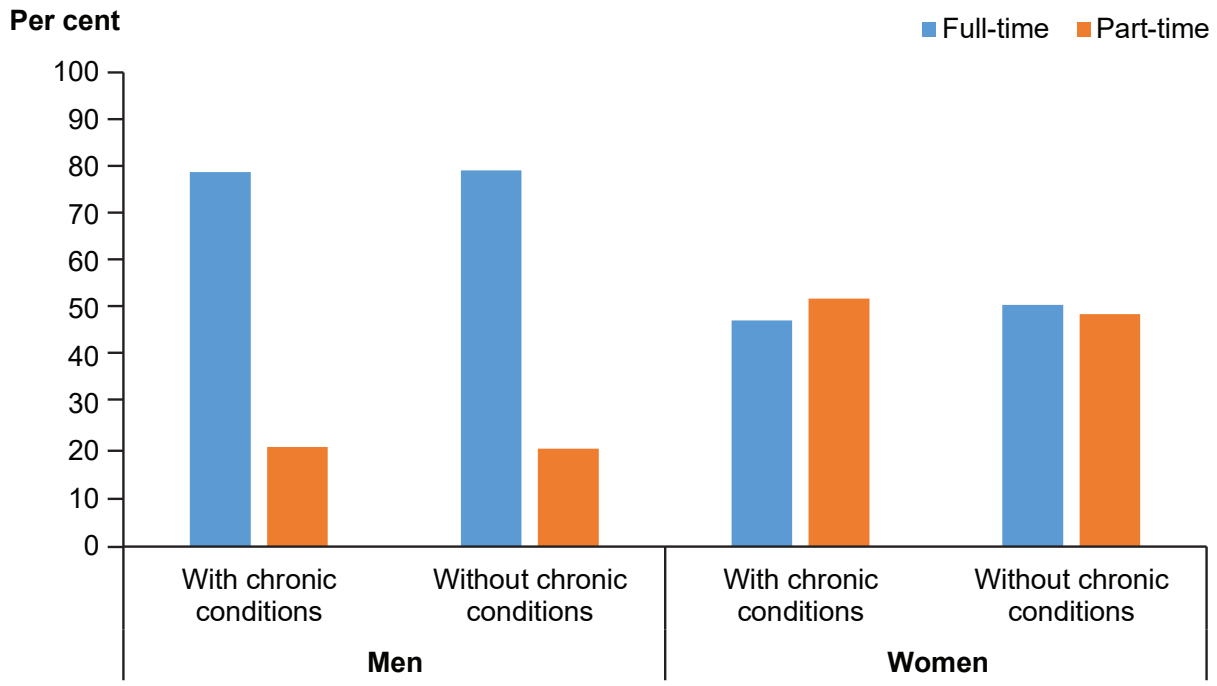
- Women with chronic conditions were 3 times as likely to be living as a single parent with dependent children than men with chronic conditions (11% compared with 4%).
- More women with chronic conditions received a government allowance as their main income source than men with chronic conditions (21% compared with 16%).
- More women with chronic conditions reported low gross personal income ($729 or less per week) than men with chronic conditions (55% compared with 38%).
- More women with chronic conditions were not in the labour force than men with chronic conditions (28% compared with 21%).
- 'Professional' was the most common occupation type (27%) among employed women with chronic conditions, whereas, for employed men with chronic conditions 'technician' was the most common (21%).
- More than twice as many employed women with chronic conditions worked part-time compared with their male counterparts (52% compared with 21%) (Figure 5).

What is gross personal income?

Gross personal income includes total cash (in dollar amounts) income from all sources before tax or anything else (except business expenses) is taken, which is expressed as weekly income ranges. This information is collected for selected respondents aged 15 years and over in the NHS 2017–18 (ABS 2018b).

In this report, gross personal income in deciles is used to define low, middle, and high income. Gross personal income within the 1st and 5th deciles ($729 or less per week) is considered low income, within the 6th to 8th deciles ($730–$1,534 per week) is middle income, and within the 9th to 10th deciles ($1,535 or more per week) is high income.

Figure 5. Employment type among employed working-age Australians (aged 15–64 years) by sex and presence or absence of chronic conditions, 2017–18



Source: AIHW analysis of ABS NHS 2017–18.

Factors associated with poor self-assessed health among mature working-age Australians with chronic conditions

Among people living with chronic conditions, poor self-assessed health is more common with increasing age—26% of those aged 45–64 years had poor self-assessed health, compared with 16% among those aged 15–44 years.

This section of the report provides in-depth analysis of factors that are associated with poor self-assessed health among Australians aged 45–64 years (mature working-age) with chronic conditions. Self-assessed health is an important predictor of mortality (Idler & Benyamini 1997) and a valid measure of mental and physical health (Baćak & Ólafsdóttir 2017).

To identify the factors associated with poor self-assessed health among mature working-age Australians with chronic conditions, a cross-sectional analysis using multiple logistic regression was conducted.

Multiple logistic regression analysis

Multiple logistic regression analysis is a statistical method used to estimate the strength of association between several explanatory variables (characteristics of interest) and an outcome of interest (in this report, poor self-assessed health is the outcome of interest). The method adjusts for the confounding effect among explanatory variables.

Adjusted odds ratio (OR) and 95% confidence interval (CI)

The output of a multiple logistic regression is presented as an adjusted odds ratio (OR), a measure of association between an explanatory variable and the outcome of interest that has been adjusted for the confounding effect of the other explanatory variables. The adjusted OR is the ratio of the odds of the outcome at 1 level of a particular explanatory variable versus the odds of the outcome at the reference level, keeping the values of all the other explanatory variables constant. Therefore:

- an OR = 1 is interpreted as no association between the explanatory variable and outcome
- an OR < 1 is interpreted as the variable at the corresponding level is associated with lower odds of the outcome compared to the reference level
- an OR > 1 is interpreted as the variable at the corresponding level is associated with higher odds of the outcome compared to the reference level.

A confidence interval (CI) is a statistical term describing a range of values within which we can be 'confident' that the true value lies, usually with a 95% chance or higher.

Reference value

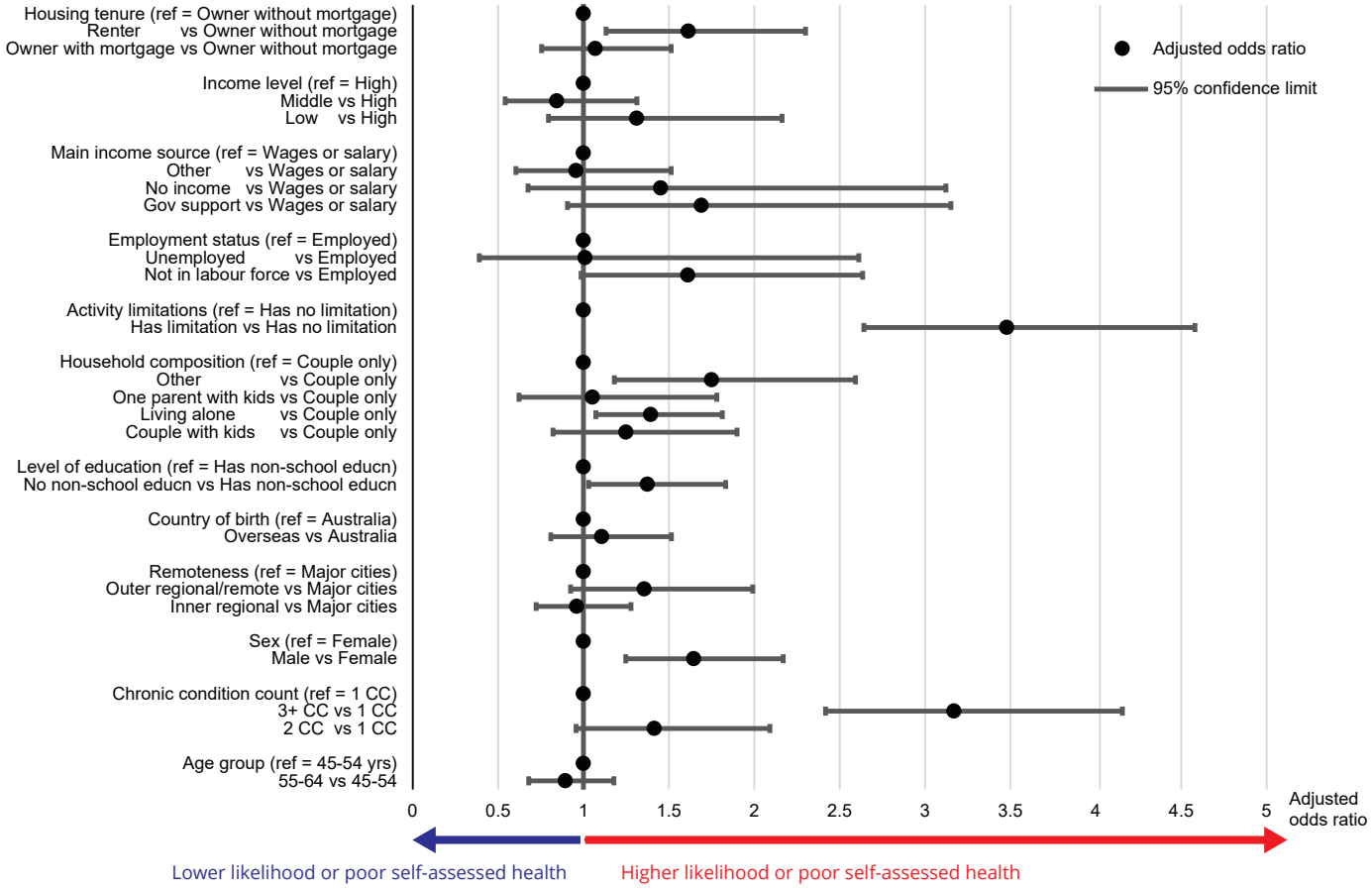
This is the comparison level against which other levels in an explanatory variable are compared. The reference values used in our regression analysis are specified as 'ref' in Figure 6.

In summary, the analysis found that after keeping all the other factors equal, mature working-age Australians with chronic conditions were more likely to report poor self-assessed health if they had any of the following characteristics:

- had 3 or more types of chronic conditions—adjusted odds ratio (OR) (95% confidence interval, CI): 3.17 (2.42–4.16) when compared with those who had 1 type of chronic condition
- had any activity limitations or a disability—adjusted OR (95%CI): 3.48 (2.64–4.58) when compared with those who had no activity limitations or a disability
- were male—adjusted OR (95%CI): 1.65 (1.25–2.17) when compared with females
- were renters—adjusted OR (95%CI): 1.61 (1.13–2.30) when compared with those who were home owners without a mortgage
- were living alone—adjusted OR (95%CI): 1.39 (1.07–1.81) when compared with those who lived in a couple-only household
- had no tertiary qualifications—adjusted OR (95%CI): 1.37 (1.03–1.83) when compared with those who had tertiary qualifications.

Among mature working-age Australians with chronic conditions, individual-based measures of socioeconomic position such as family composition of household, home ownership, and education were found to be important factors in their likelihood of reporting poor self-assessed health. In this analysis, employment status was not associated with the likelihood of reporting poor self-assessed health. This finding is consistent with the finding from a systematic review of prospective cohort studies that found insufficient evidence on the effects of employment on self-assessed health (Van Der Noordt et al. 2014). The NHS 2017–18 data used in this analysis had limited information on employment characteristics, therefore, further analysis is needed to examine whether other circumstances surrounding employment such as job stability or security and quality of working environment can affect health status.

Figure 6. Characteristics associated with likelihood of reporting poor self-assessed health among mature working-age population (45–64 years) with chronic conditions, 2017–18



Notes

a. 'Other' family composition includes multiple family households, group households, and other 1-family households, for further information see Technical documents.

b. 'Other' source of income includes regular income from an unincorporated business or share in a partnership, rental investment property, superannuation (an annuity or private pension), and any other regular source such as workers' compensation and scholarships.

c. Due to small numbers, those who responded as rent-free, other types of housing tenure, and those with missing response were excluded in the regression analysis.

Source: AIHW analysis of ABS NHS 2017–18.

Number of chronic conditions

Multimorbidity—the presence of 2 or more chronic conditions in a person at the same time—is common among those aged 45–64, with 30% of Australians aged 45–64 reporting multimorbidity in 2017–18 (AIHW 2020b). Multimorbidity can make treatment more complex (Harrison & Siriwardena 2018) and requires ongoing management and coordination of specialised care across multiple parts of the health system (Department of Health 2020b).

Mature working-age Australians living with chronic conditions who reported having 3 or more different types of chronic conditions were more likely to report poor self-assessed health than those who only had 1 type of chronic condition (adjusted OR 3.17, 95% CI 2.42–4.16) (Figure 6).

For further details on the prevalence and the profiles of Australians with multimorbidity, see the AIHW report Chronic conditions and multimorbidity (AIHW 2020a).

Activity limitations or disability

In 2017–18, an estimated 2 in 5 (39%) mature working-age Australians with chronic conditions reported some activity limitations or disability.

Working-age Australians with chronic conditions, living with activity limitations or disability were more likely to have poor self-assessed health as those without activity limitations or disability (adjusted OR 3.48, 95% CI 2.64–4.58) (Figure 6).

What does living with activity limitations or disability mean?

The activity limitations or disability information is obtained from the variable 'disability status' in the NHS 2017–18. Disability status is defined as follows: a disability or restrictive long-term health condition exists if a limitation, restriction, impairment, disease or disorder has lasted, or is expected to last, for 6 months or more, which restricts everyday activities. The specific limitation or restriction is further classified by whether the limitation or restriction is a limitation in core activities, or a schooling/employment restriction only. For more information, please see the NHS Users' Guide (ABS 2018b). In this report, disability status was used to identify self-reported activity limitation, and did not classify whether an individual had a disability.

Renter

In 2017–18, just over 1 in 5 (21%) mature working-age Australians with chronic conditions lived in rental accommodation.

For mature working-age Australians with chronic conditions, those living in rental accommodation were more likely to report poor self-assessed health than those living in an owner-occupied dwelling without a mortgage (adjusted OR 1.61, 95% CI 1.13–2.30) (Figure 6).

Living alone

In 2017–18, almost 1 in 5 (18%) mature working-age Australians with chronic conditions were living alone.

Mature working-age Australians with chronic conditions who were living alone were more likely to report poor self-assessed health as those who were living in couple households (adjusted OR 1.39, 95% CI 1.07–1.81) (Figure 6).

How COVID-19 could affect the life and work of Australians with chronic conditions

In 2020 and 2021, the lives of all Australians have been affected by the COVID-19 pandemic to varying degrees. Due to public health measures that were implemented to curb the spread of COVID-19, many Australians may have temporarily or permanently lost their employment and main source of income, as evidenced by a large increase in people seeking government financial assistance (DSS 2021). In addition to the socioeconomic impact of the COVID-19 public health measures, Australians with chronic conditions are at a greater risk of severe illness from COVID-19 than those without chronic conditions.

This section explores data on how socioeconomic changes due to the COVID-19 pandemic may have affected working-age Australians with chronic conditions.

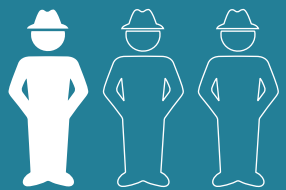
Social restriction measures: risk of social isolation and loneliness

During an outbreak, social interaction was significantly limited by government restrictions that were put in place to lower the risk of COVID-19 transmission in the community, increasing the risk of social isolation and loneliness. The ABS Household Impacts of COVID-19 Survey found that loneliness was the most commonly reported personal stressor over the survey periods of April 2020, June 2020, and October 2020 (ABS 2021a). The percentage of Australians who reported experiencing loneliness in the previous 4 weeks of October 2020 was double that in June 2020, 19% compared with 9% (ABS 2021a). In April 2021, there was an easing of COVID-19 restrictions around Australia, during this period of eased restrictions the percentage of Australians who reported experiencing loneliness decreased to almost the same level as in June 2020—10% (ABS 2021a).

People who are living on their own may have a greater risk of experiencing social isolation and loneliness (Relationships Australia 2018). Living alone has also been associated with a 30% increased risk of early death, which is similar to the risk associated with well-known risk factors such as obesity (Holt-Lunstad et al. 2015). In April 2021, the ABS survey found people who were living alone reported experiencing poor social connection, including a poor sense of being part of a group or community, compared to people living in family households with children—11% compared with 6% (ABS 2021a).

In 2017–18, more working-age Australians with chronic conditions were living alone compared to those without chronic conditions (13% compared with 8%). Living alone was found to be significantly associated with reporting poor self-assessed health among Australians aged 45–64 with chronic conditions (Figure 6).

Labour force changes among more mature working-age Australians



Only 1 in 3 human resources leaders said their organisation 'somewhat sought' to retain older workers during the COVID-19 pandemic.

Source: Employing and retaining older workers, Australian Human Resources Institute 2021.

In Australia, the impact of the COVID-19 pandemic on unemployment was brief; with data from the ABS showing that at the first peak of the pandemic in July 2020, the unemployment rate was 7.4% and by October 2021, the rate was down to 5.2% (ABS 2021b). At the time of writing, there is no information on how the pandemic affected labour force participation among Australians with chronic conditions, particularly, among those of mature working-age. This is particularly important as mature-age workers can find it hard to change jobs or find a new job if they are made redundant (COTA 2018). Additionally, ABS data

showed that there was an increase in the number of people aged 55–64 who left the labour force due to being unable to work permanently in the 12 months of the COVID-19 pandemic (Figure 7). Therefore, more research is needed to understand the impact of the COVID-19 pandemic on labour force participation among mature working-age people with chronic conditions.

In this report, we found an association between chronic conditons and labour force participation among mature working-age Australians; those with chronic conditions were more likely to be out of the labour force (Figure 2). However, among mature woking age Australians with chronic conditions, being out of the labour force was not associated with a higher likelihood of poor self-assessed health when compared with their employed counterparts (Figure 6).

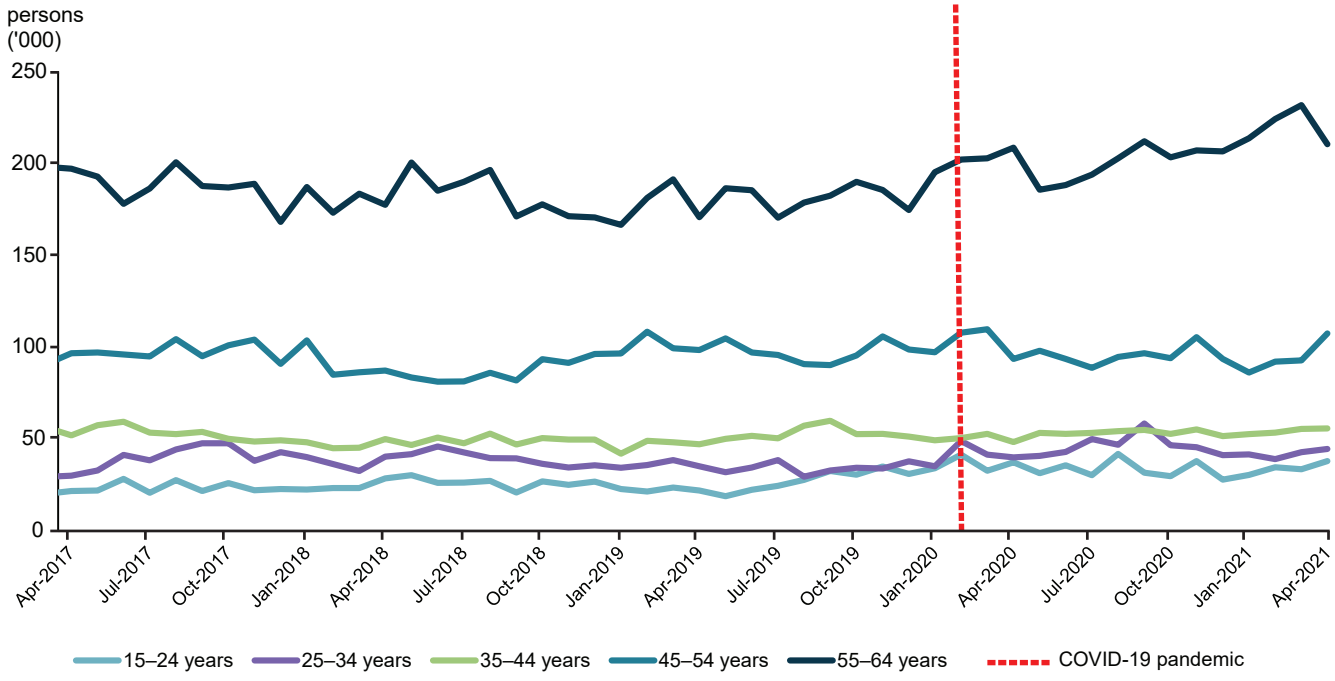
The labour force participation rate for mature working-age Australians is considered low when compared to other OECD countries. Based on 2019 OECD data, Australia's labour force participation rate for those aged 55–64 was 67%. This is lower than Japan and Sweden at 78% and 82%, respectively (OECD 2021) (based on participation only and not utilisation (hours worked)). The Australian Government recognises the barriers to labour force participation among the mature working-age population; more information on the support available can be found here—https://www.dese.gov.au/mature-age-hub

Labour force participation rate

The labour force participation rate is calculated as the labour force (those employed or unemployed, excluding those who are not in the labour force) divided by the total working-age population. The working-age population refers to people aged 15 to 64. This indicator is broken down by age group and it is measured as a percentage of each age group

Source: OECD 2021.

Figure 7. Number of persons not in the labour force (NILF) due to being unable to work permanently by age group, April 2017 to April 2021



Source: ABS 2021c.

Risk of financial stress

'Working with a physio who has specialised in pain science has been most effective component of my ongoing management, along with Pilates and a few sessions with a psychologist to manage depression from chronic pain—but that got too expensive. My condition has had a huge impact on my working life and income …'

Source: Employing and retaining older workers, Australian Human Resources Institute 2021.

The COVID-19 pandemic may have had significant impact on the employment and financial circumstances of many people, particularly for those living with chronic conditions. The effects of losing employment or increasing rent may put them at even greater risk of financial stress.

Personal insolvency is a sign of major financial stress. Data from the Australian Financial Security Authority (AFSA), who administer and regulate the personal insolvency system, showed that over the period 2009–10 to 2018–19, unemployment or loss of income was a common reason for personal insolvency. Figure 8 shows that more people aged 45–64 experienced personal insolvency due to ill health compared with those aged under 45 years.

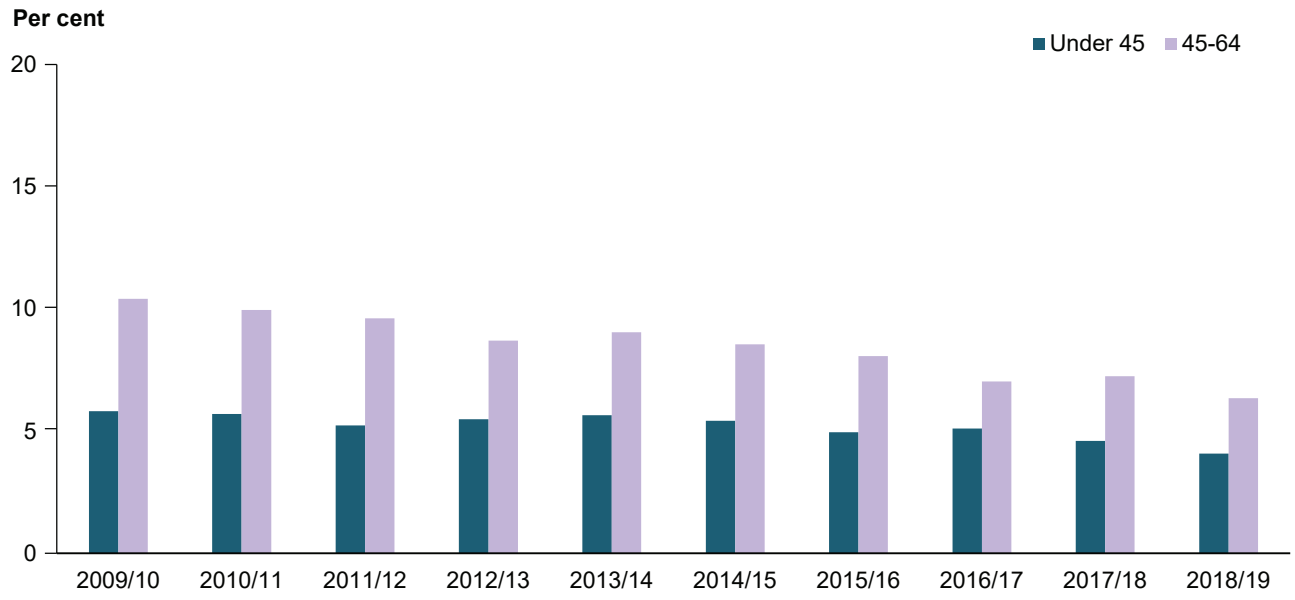
Personal insolvency or bankruptcy

Bankruptcy is a legal process where a person experiencing financial difficulties completes and submits a bankruptcy form to AFSA; or a creditor (someone who is owed more than $10,000) makes a person bankrupt through a court process known as a sequestration order.

Bankruptcy can release a person from repaying most debts. However, it may affect a person's ability to get credit, travel overseas or gain some types of employment. Bankruptcy is 1 of several formal options available under the Bankruptcy Act 1966 (Cwlth); other options include a debt agreement or a personal insolvency agreement.

Source: Australian Financial Security Authority (AFSA) (https://www.afsa.gov.au/).

Figure 8. Percentage of personal insolvency due to ill health, 2009–10 to 2018–19, by age group



Source: AFSA 2021.

The Australian Government has put in place several support programs to help Australians cope with employment and financial situation changes due to the COVID-19 pandemic, including:

- addition of new Medicare Benefit Schedule (MBS) items for bulk-billing, as incentives for services provided to patients who are more vulnerable to COVID-19 thereby increasing public access to bulk-billed health services
- provision of financial support, such as through the JobKeeper payment and the Coronavirus Supplement (paid to those receiving the JobSeeker payment, the Parenting payment, Youth Allowance and other selected allowances).

More information on Australian Government COVID-19-related support can be found at Coronavirus (COVID-19)—Department of Education, Skills and Employment, Australian Government (dese.gov.au).

Gaps and limitations

Indigenous Australians and priority populations

The analyses in this report are based on the NHS 2017–18, which has limited Indigenous Australian and priority population participants. This is a data gap and future editions of this report will aim to address this. See the What's next? section below for details.

Self-reported chronic conditions

The NHS 2017–18 survey design excluded people in hospitals, nursing homes, and other health facilities, therefore excluding those with a more severe condition, which may introduce healthy respondent bias. The definition of chronic conditions used in this report is based on self-reported information from the NHS 2017–18. Self-reported chronic conditions in general have been shown to be a reliable measure of ill health; however, it is less reliable in estimating the prevalence of a specific chronic condition based on medical diagnoses (Van Der Heyden et al. 2014). This is mostly due to differences in people's perception of the diagnoses. For example, differences in their understanding of disease severity and its effects on daily living, which can then influence whether they report their specific chronic condition in a survey (Van Der Heyden et al. 2014).

Therefore, as this report was largely based on the NHS 2017–18, analysis to do with comparing specific chronic conditions (such as diabetes, depression, or chronic pain) and their association with socioeconomic factors and health status were considered out of scope, due to potential variation in the validity of data for specific chronic conditions.

A cross-sectional data analysis

This report focused on the cross-sectional analysis of individual-based measures of socioeconomic position of people with and without chronic conditions and their association with self-assessed health. Therefore, the associations described in this report do not infer a causal relationship. To be able to understand the causal relationship between chronic conditions and socioeconomic position and effects on health, a longitudinal data analysis is required.

The upcoming availability of the Multi-source Enduring Linked Data Assets (MELDAs) will provide a longitudinal data analysis opportunity to better understand the complex interrelationships between socioeconomic position and health outcomes in Australians with chronic conditions.

The ABS Multi-Agency Data Integration Project (MADIP) is a MELDAs partnership among Australian Government agencies to develop a secure and enduring approach for combining information on health surveys, healthcare, education, government payments, personal income tax, and population demographics (including the Census) to create a comprehensive picture of Australia over time (ABS 2020b). Thus, future reports could undertake a longitudinal data analysis of MADIP to provide a better understanding of the relationship between chronic conditions, socioeconomic factors and health.

Further information can be found at the Data Integration Partnership for Australia webpage, the ABS and the AIHW.

What's next?

Indigenous Australians

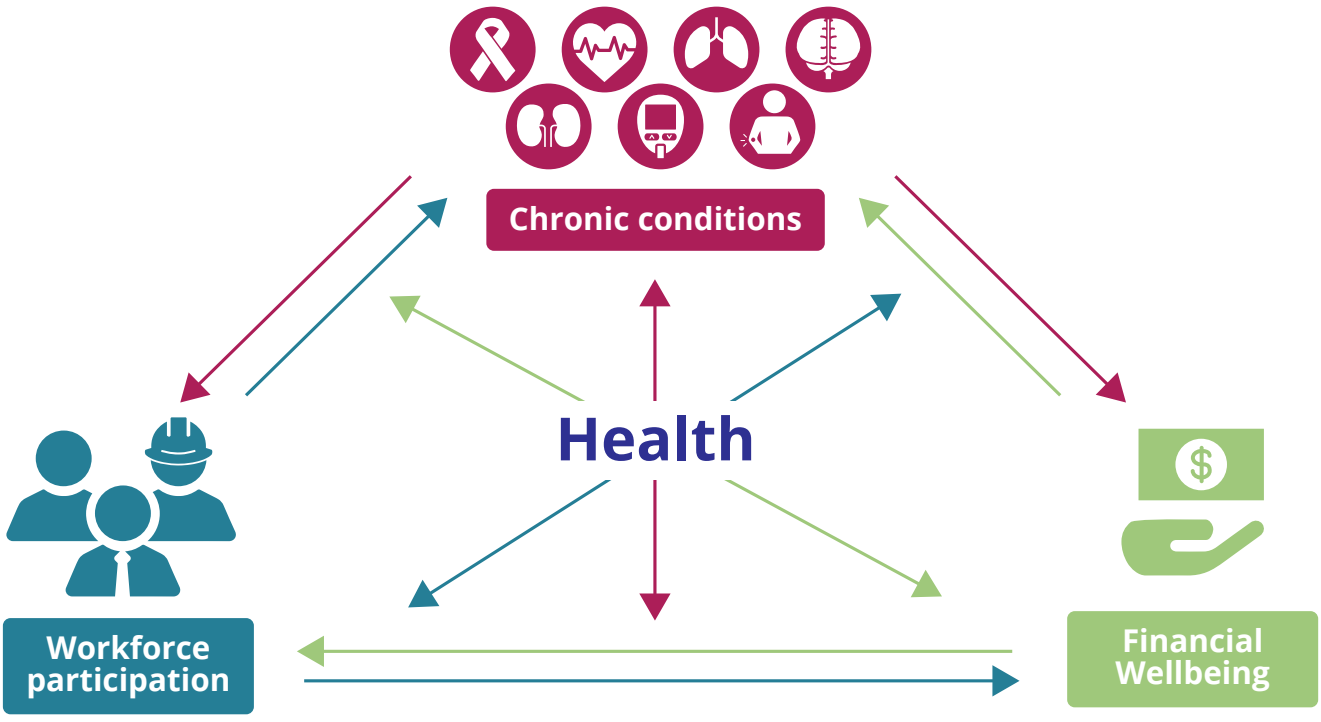
According to the latest Health Performance Framework (HPF) report (Aboriginal and Torres Strait Islander Health Performance Framework—summary report 2020, AIHW 2020c), the health of Aboriginal and Torres Strait Islander people has improved on a number of measures over the most recent decade. The rate of avoidable deaths has decreased and death rates for cardiovascular disease, diabetes and kidney disease have fallen. There have also been improvements in some social determinants of health—levels of educational attainment have increased and the proportion of Indigenous Australians living in overcrowded housing has decreased (AIHW 2020b).

Future reports could explore how the health status of working-age Indigenous Australians with chronic conditions vary with different living and working situations. The National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) 2018–19 could be used as the data source. The NATSIHS was specifically developed and designed to focus on the stories of Aboriginal and Torres Strait Islander people (ABS 2019).

Understanding the complex relationship between socioeconomic position and health outcomes among Australians with chronic conditions

The relationship between chronic conditions, socioeconomic factors and health is complex and multi-directional (Figure 9). For example, being in good health may increase the likelihood of keeping or obtaining employment thus ensuring a good financial standing; alternatively, having stable employment and a reliable income can also increase the likelihood of having good health. In addition, having a good financial standing may increase the likelihood of having good health regardless of employment status. Longitudinal data and future access to MELDAs such as MADIP can provide a better understanding of the causal relationship between socioeconomic factors and health.

Figure 9. Conceptual framework on the interrelationship between workforce participation, financial wellbeing, chronic conditions, and health



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