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Change in chronic disease prevalence and health behaviours over the first four waves of TILDA

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Contents

Key findings.....	90
6.1 Introduction.....	91
6.2 Self-rated health	92
6.3 Chronic disease.....	94
6.3.1 Prevalence of cardiovascular conditions at Waves 1 to 4	94
6.3.2 Incident cardiovascular conditions at Wave 2, 3 and 4.....	95
6.3.3 Prevalence of non-cardiovascular conditions at Waves 1 to 4	96
6.3.4 Incidence of non-cardiovascular conditions at Waves 2, 3 and 4.....	97
6.4 Falls and fractures	98
6.5 Behavioural health.....	99
6.5.1 Smoking.....	99
6.5.2 Alcohol.....	100
6.5.3 Physical Activity.....	101
6.6 Conclusions	102
6.7 References	103
Apendices.....	107

6

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Key findings

- From Wave 1 to Wave 4, there was a decrease in the proportion of people aged 50-64 years (21% to 16%) and 65-74 years (23% to 16%) who rated their health as fair or poor. Social engagement had a positive impact on self-rated health.
- In terms of cardiovascular disease, there was an increased prevalence of hypertension (35% to 38%), diabetes (8% to 11%), heart attack (4% to 6%), stroke (1% to 2%), and transient ischaemic attack (2% to 4%) between Waves 1 and 4.
- In terms of non-cardiovascular disease, there was an increased prevalence of arthritis (26% to 39%), osteoporosis (9% to 17%), cataracts (9% to 14%) and lung disease (4% to 5%) from Wave 1 to 4.
- Pain affected 1 in 3 people aged 50 and over, and this was consistent at all waves.
- The number of people who reported recurrent falling in the last year increased from Wave 1 to Wave 4 (7% to 9%).
- The proportion of women aged 50-64 years who reported current smoking decreased between Waves 1 and 4 (24% to 17%).
- Problematic alcohol use was more prevalent in men than women (15% versus 9% at Wave 4).
- A large proportion (45%) of adults aged 50 and over walked less than the recommended 150 minutes per week across all four waves. This was particularly evident in those aged 75 and older compared to those aged 50-64 years (63% versus 42% at Wave 4).

6.1 Introduction

With increasing age, there is an increasing burden of chronic disease, and a subsequent demand on our health services. This has been demonstrated in many studies worldwide (1). The opportunities and challenges associated with population ageing have been addressed in Ireland's health reform policy "*Healthy Ireland – A Framework for Improved Health and Well-being 2013-2025*" (2) and in "*The National Positive Ageing Strategy*"(3), which aims to increase the proportion of people who are healthy at all stages of life; to improve or manage their physical health, mental health and well-being; and to use an evidence-based approach to better inform policy responses to population ageing. Data collected by The Irish Longitudinal Study on Ageing (TILDA), including information on chronic health conditions and health behaviours can help to inform policy and achieve these Government objectives.

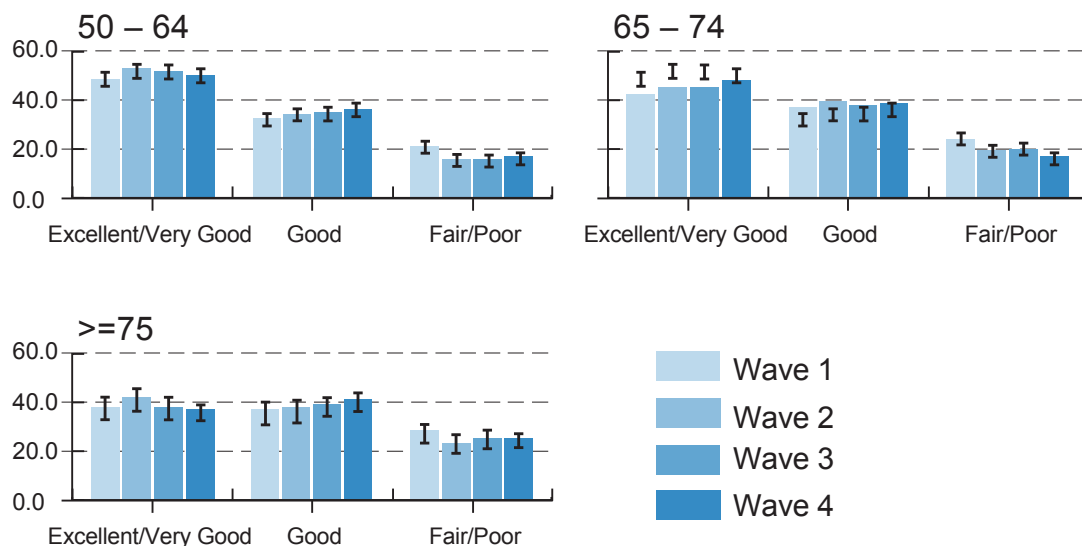
In this Chapter, we present self-rated health, the prevalence and incidence of chronic health conditions (cardiovascular and non-cardiovascular), falls and fractures as well as indicators of behavioural health (smoking, alcohol intake and walking) across four waves of data collection. Prevalence refers to the cumulative proportion of people who report ever having a condition at each wave. Incidence refers to the proportion of new cases at each wave, which had not been reported by the participants in previous waves. For example, incident cases at Wave 3 refers to the proportion of new cases reported by participants at Wave 3, not already self-reported at Waves 1 and 2.

As part of the TILDA data collection, participants completed a computer-assisted personal interview (CAPI) at each wave. This is carried out by trained interviewers in the participant's home. They were also invited to complete a self-completion questionnaire (SCQ), in their own time, which they then returned by post to the TILDA centre. Data obtained during the CAPI and SCQ at each of the first four waves of TILDA are presented in this Chapter. To facilitate an accurate comparison between Waves 1 to 4, only adults who completed a self-interview at all four waves are included in the analysis (n=5,200). The majority of measures presented in this Chapter were obtained in the CAPI, with the exception of alcohol intake which was obtained from the SCQ. 4,557 of the participants included in this analysis completed an SCQ at Wave 4, while 3,961 participants completed the SCQ at all four waves. Where participants are separated into age groups, it is age at the reported wave that is used to categorise participants. All reported data are weighted to account for probability of selection, survey non-response and attrition.

6.2 Self-rated health

Poor self-rated health has consistently been associated with increased morbidity and mortality (4). Over the last decade, older adults in Ireland have had higher levels of self-rated health compared to their EU counterparts (5). In TILDA, self-rated health is measured in the CAPI, by asking participants to rate their health as Excellent, Very Good, Good, Fair, or Poor. Figure 6.1 illustrates responses to this at each of the four waves. Despite the burden of increasing age and chronic disease, over 40% of participants under 75 years rated their health as Excellent or Very Good at all four waves, while just under 40% of those aged 75 and over rated their health as Excellent or Very Good. This was coupled with a decline in those who rated their health as Fair or Poor (Appendix Table 6.1).

Figure 6.1: Self-rated health across waves by age group.



Note. N = 5200; Error bars correspond to 95% confidence in intervals

Next we examined the impact of social engagement on self-rated health. In the CAPI, participants were asked “Do you participate in any groups such as a sports or social group or club, a church connected group, a self-help or charitable body or other community group or a day care centre?” At Wave 4, 53% of people participated in such groups and these people had better self-rated health than those who didn’t participate (Figure 6.2). Similarly, the 23% of people who reported that they volunteered (Figure 6.3) and the six percent of people who reported that they cared for others (Figure 6.4) also had better self-rated health.

Figure 6.2: Self-rated health by participation in social clubs, church groups, charitable bodies or other community groups at Wave 4.

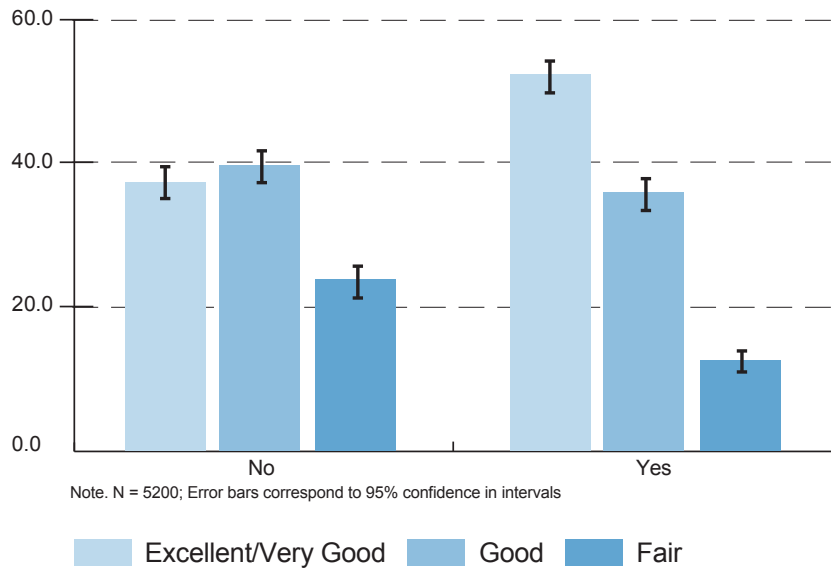


Figure 6.3: Self-rated health by volunteering status at Wave 4.

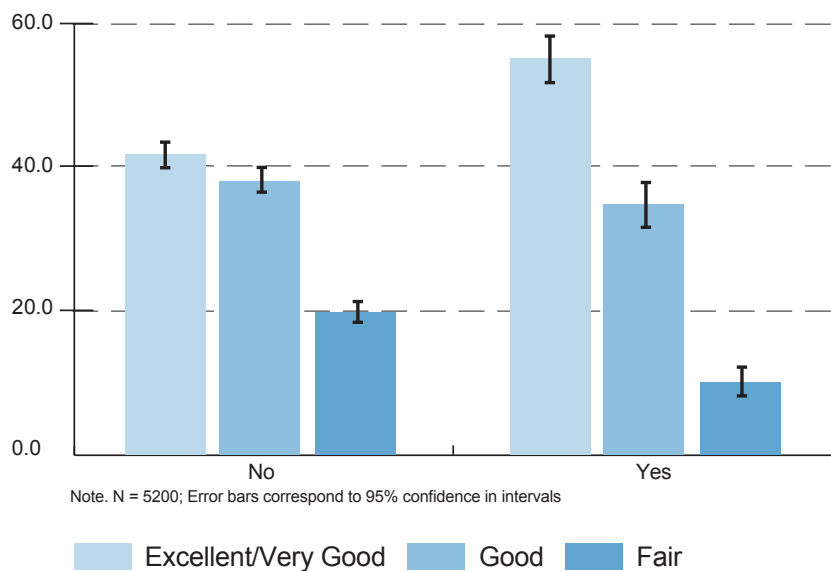
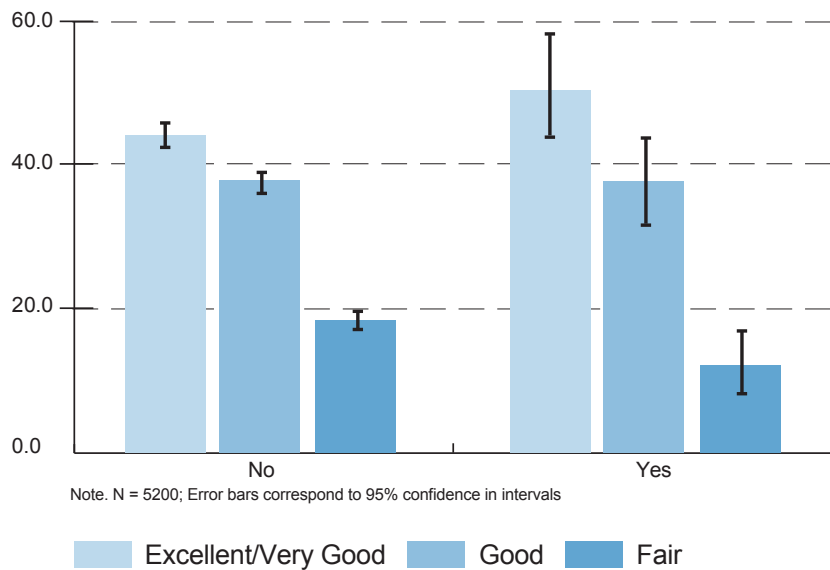


Figure 6.4: Self-rated health by caring status at Wave 4.

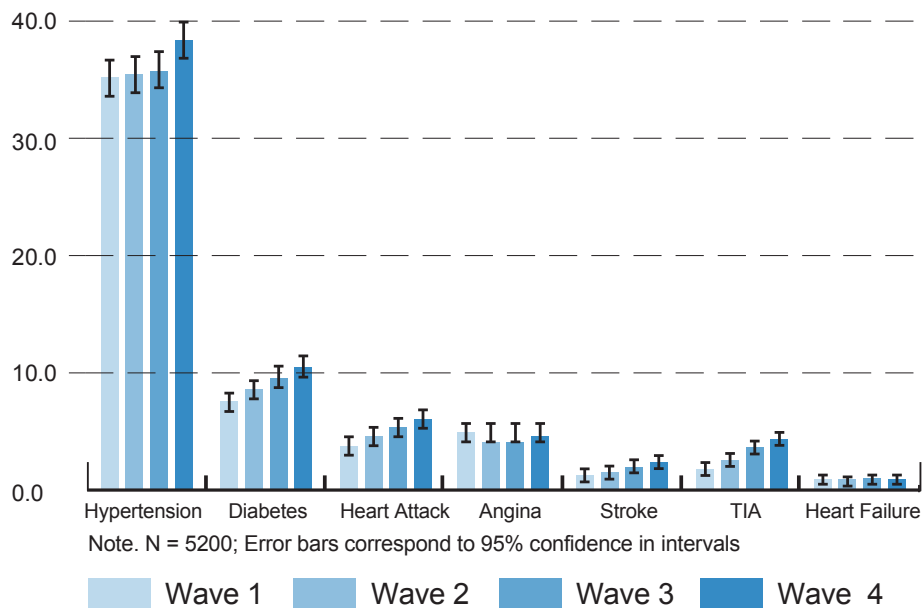


6.3 Chronic Disease

6.3.1 Prevalence of cardiovascular conditions at Waves 1 to 4

Despite substantial progress in the reduction of age-standardised death rates (weighted averages of the age-specific rates) from cardiovascular disease (3), it remains the most common cause of death in Ireland. Many modifiable risk factors (e.g. smoking, obesity and physical inactivity) play a role in increasing cardiovascular risk, therefore a concerted effort is required to improve health behaviours and reduce the occurrence of cardiovascular disease. As part of the CAPI, participants were asked to self-report a doctor's diagnosis of hypertension, diabetes, heart attack, angina, stroke, transient ischaemic attack (TIA) and heart failure. The results are displayed in Figure 6.5. There was an overall increase in the prevalence of hypertension (35% to 38%), diabetes (8% to 11%), heart attacks (4% to 6%), strokes (1% to 2%) and TIAs (2% to 4%) between Waves 1 and Wave 4. The increase in diabetes and heart attack in particular, was most evident in men (Appendix Table 6.2). As reported previously, the older age group (≥ 75 years) reported a higher prevalence of cardiovascular conditions than the youngest age group (50-64 years) throughout the waves (Appendix Table 6.3).

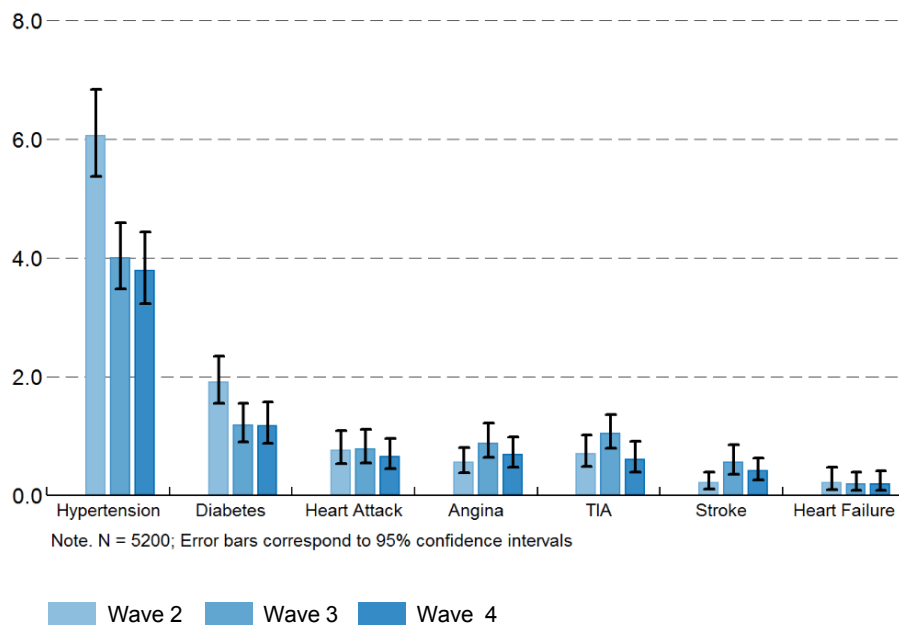
Figure 6.5: Prevalence of cardiovascular conditions from Waves 1 to 4.



6.3.2 Incident cardiovascular conditions at Waves 2, 3 and 4

Incident cases of cardiovascular disease, i.e. a condition reported by the participant at the current wave, but not in any of the previous waves, is presented in Figure 6.6. While prevalence increased, there was a decline in incident cases of hypertension (6% to 4%) and diabetes (2% to 1%) after Wave 2. Higher incident cases of hypertension at Wave 2 may have been due to feedback received after the Wave 1 health centre assessment, which prompted participants to seek advice from their GP. The proportion of new cases at Waves 3 and 4 were stable.

Figure 6.6: Incidence of newly reported cardiovascular conditions at Waves 2, 3 and 4.

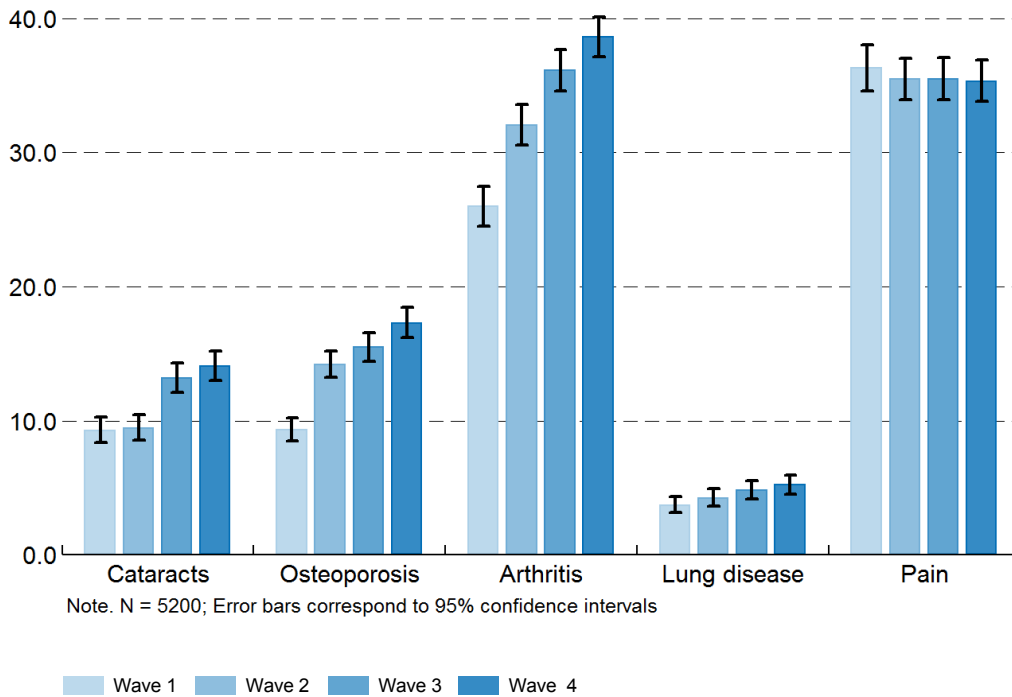


6.3.3 Prevalence of non-cardiovascular conditions at Waves 1 to 4

Non-cardiovascular conditions such as osteoporosis and cataracts are associated with increased morbidity, decreased quality of life, and increased mortality (6). Osteoporosis is an increasingly common, chronic condition estimated to affect over 200 million individuals worldwide (7) and has been estimated to cause over 8.9 million fractures annually. Osteoporotic fractures account for 0.8% of the global burden of non-communicable disease and the annual loss of over 5.8 million disability-adjusted life years (DALYs) (8). Cataracts are one of the most common causes of vision loss in people over age 40 and are the principal cause of blindness in the world. The global prevalence of cataract in adults >50 years is estimated at 47.8% while it is 19.3% within Europe (9). According to a recent survey by the Association of Optometrists, the average wait for cataract surgery in Ireland is 28 months but up to five years in some areas (Association of Optometrists Ireland, 2018 Children's Eye-Care & Cataract Services Report).

During the CAPI, participants were asked if they had ever received a doctor's diagnosis of cataracts, osteoporosis, arthritis or lung disease and whether they were often troubled by pain. From Wave 1 to Wave 4, there was an increased prevalence of cataracts (9% to 14%), osteoporosis (9% to 17%), arthritis (26% to 39%) and lung disease (4% to 5%) (Figure 6.7).

Figure 6.7: Prevalence of non-cardiovascular conditions across the four waves.

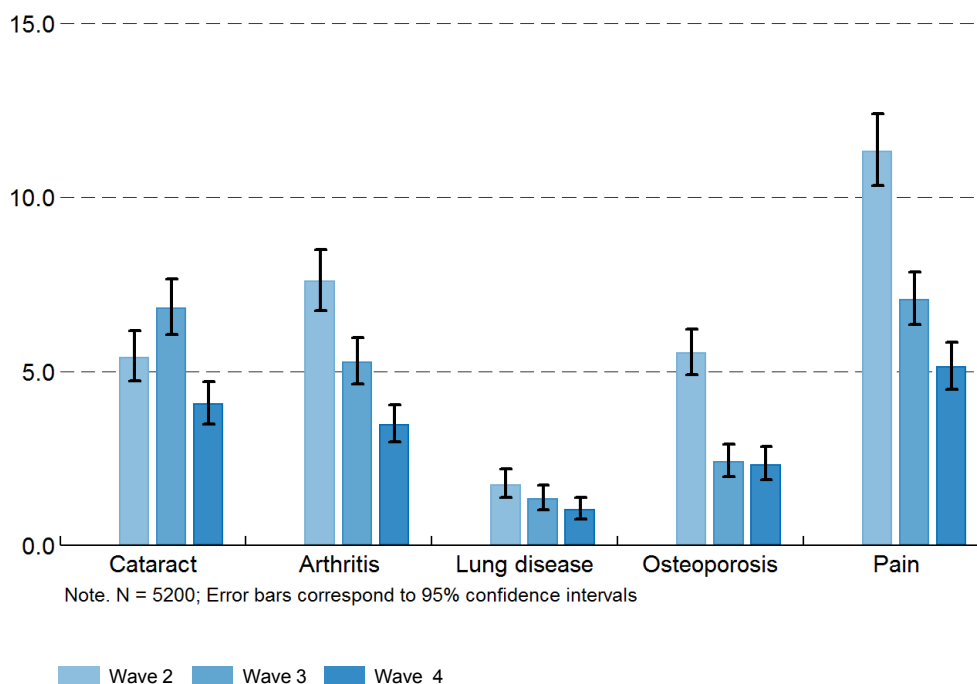


Older women (age ≥ 75) reported the highest burden of both osteoporosis and arthritis, with an increased level across all four waves (Appendix Tables 6.4, 6.5, and 6.6). This could potentially increase the risk of disability and reduced physical activity in older women in Ireland. Cataracts were common, particularly in the older age group (age ≥ 75), however it was within women aged 50-64 years that there was an increased prevalence of the condition between Waves 1 and 4 (Appendix Tables 6.4 and 6.6). At Wave 1, 38% of participants reported that they were often troubled by pain and this was consistent across all subsequent waves (Figure 6.7). Again, this could potentially increase the risk of disability and reduced physical activity in this group.

6.3.4 Incidence of non-cardiovascular conditions at Waves 2, 3 and 4

Incident new non-cardiovascular disease cases at Waves 2 to 4 are presented in Figure 6.8. Despite an increased prevalence across the waves, the proportion of incident cataracts, arthritis, osteoporosis and pain decreased from Wave 2 to Wave 4. In the case of osteoporosis, this may have been due to feedback on bone density (from the heel ultrasound test) provided to the participants after the Wave 1 health centre assessment.

Figure 6.8: Incident non-cardiovascular conditions at Waves 2, 3 and 4.

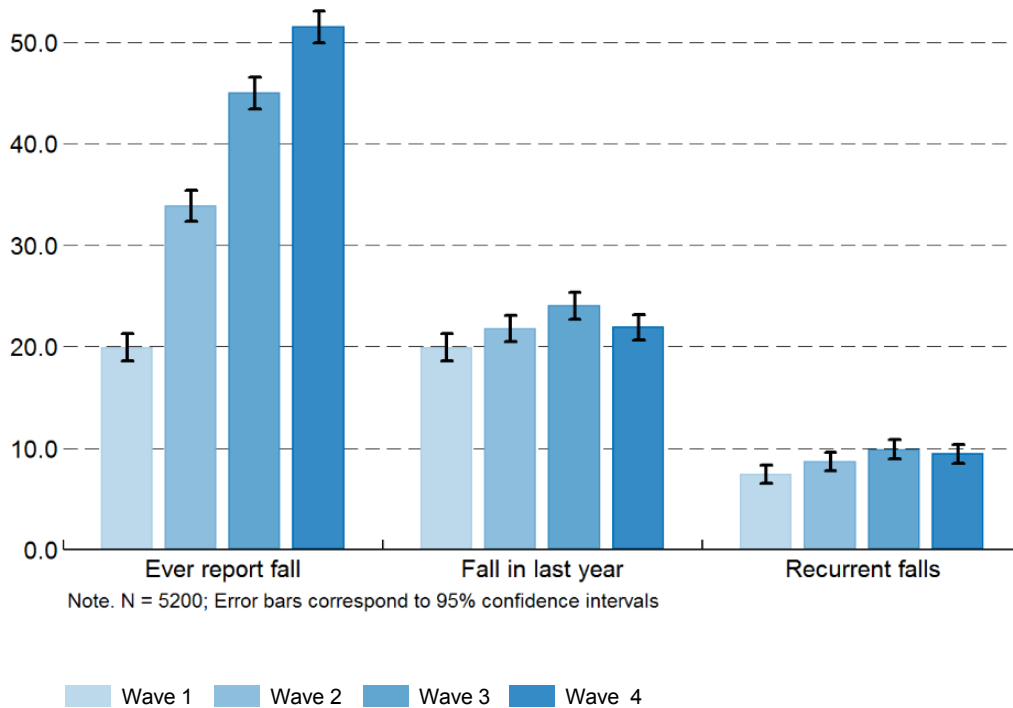


6.4. Falls and fractures

Falls are the dominant cause of injuries among older adults, and are linked to poorer overall function and early admission to institutional care facilities (10). One in three adults over the age of 65 falls each year (11), with a single fall significantly increasing the risk of subsequent falls (12). An Economic Burden of Illness Study estimated that fall-related injuries in older people cost €402 million to the Irish economy in 2006 and would increase to €922-1077 by 2020 in the absence of a National Fall and Fracture Prevention Strategy being implemented (13). Hip fracture is the most common disabling injury in older adults, and can cause accidental death. Research has shown a 5-10% mortality rate after one month, rising to 30% after one year (14), with only 40-60% of surviving patients regaining their pre-fracture level of mobility (15).

Participants were asked a number of questions pertaining to falls history in the CAPI at each wave the proportion of people who ever reported falling, that is they reported falling at any of the waves up to Wave 4; the proportion of those who reported a fall in the last year prior to interview; and the proportion of those who reported recurrent falls in the last year at each wave. The prevalence of those who ever reported a fall cumulatively up to the reported wave increased from 20% to 52% between Waves 1 and 4. The number of people who reported recurrent falling also increased from 7% to 9%. The proportion of people who reported falling in the year prior to interview, rose from Wave 1 to Wave 3, however we did not see an increase at Wave 4.

Figure 6.9: Proportion of sample who reported a fall – ever, in the last year or recurrent - from Wave 1 to Wave 4.



6.5 Behavioural health

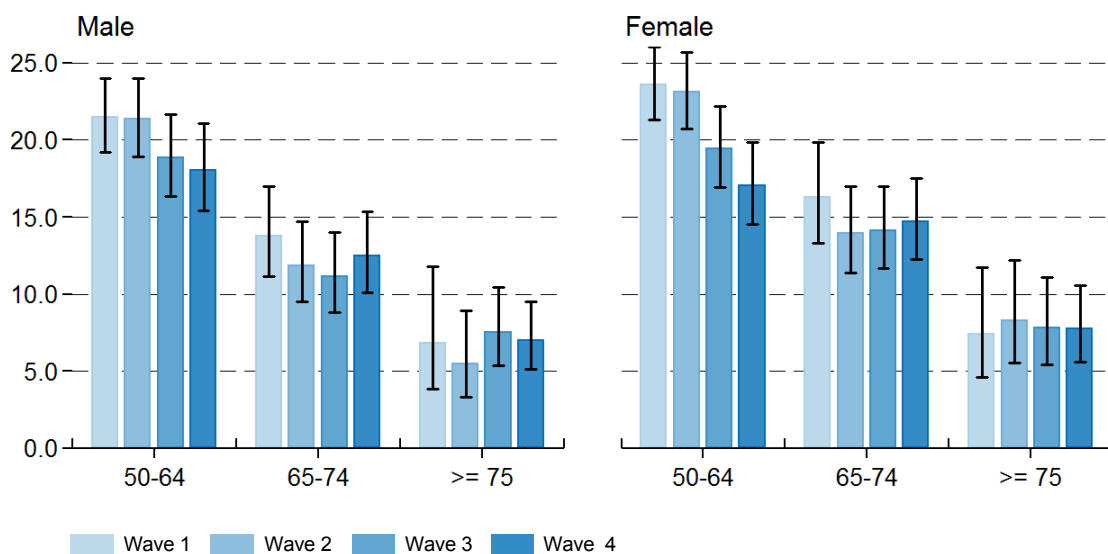
The prevalence of chronic disease, including cardiovascular disease, has increased in older adults in Ireland since Wave 1 data collection in 2009-2011. Behavioural health refers to the modifiable risk factors, such as smoking, alcohol and physical inactivity that can negatively influence health and contribute to chronic disease. In this section, smoking habits, alcohol intake, problem drinking, and time spent walking are examined in order to identify any change in behavioural health patterns across the four waves.

6.5.1 Smoking

Smoking is a well-known risk factor for a variety of conditions, in particular, cardiovascular and lung disease. It also plays a role in other non-life-threatening chronic conditions such as cataracts and osteoporosis (16). The “*Tobacco Free Ireland*” policy (17) introduced in 2013, aims to reduce the prevalence and initiation of smoking. It included a piece on developing legislation for the introduction of standardised/plain packaging, which was implemented in the *Public Health (Standardised Packaging of Tobacco) Act 2015* and the EU Tobacco Products Directive.

Smoking status was assessed at each wave using questions in the CAPI. Participants were categorised as non-smokers, past smokers, or current smokers. There was an overall decrease in the proportion of current smokers across all four waves (19% to 13%), which is described in Appendix Table 6.7. This decrease was primarily driven by younger women (age 50-64 years), with a decrease from 24% at Wave 1 to 17% at Wave 4 (Figure 6.10). The lowest proportion of current smokers was in the oldest age group (7% of ≥ 75 vs 21% of 50-64 year olds). There was a very low number of new smokers, with only 12 people who were non-smokers at Wave 1 having commenced smoking during the subsequent three waves.

Figure 6.10: Proportion of current smokers from Waves 1 to 4, by sex and age group.



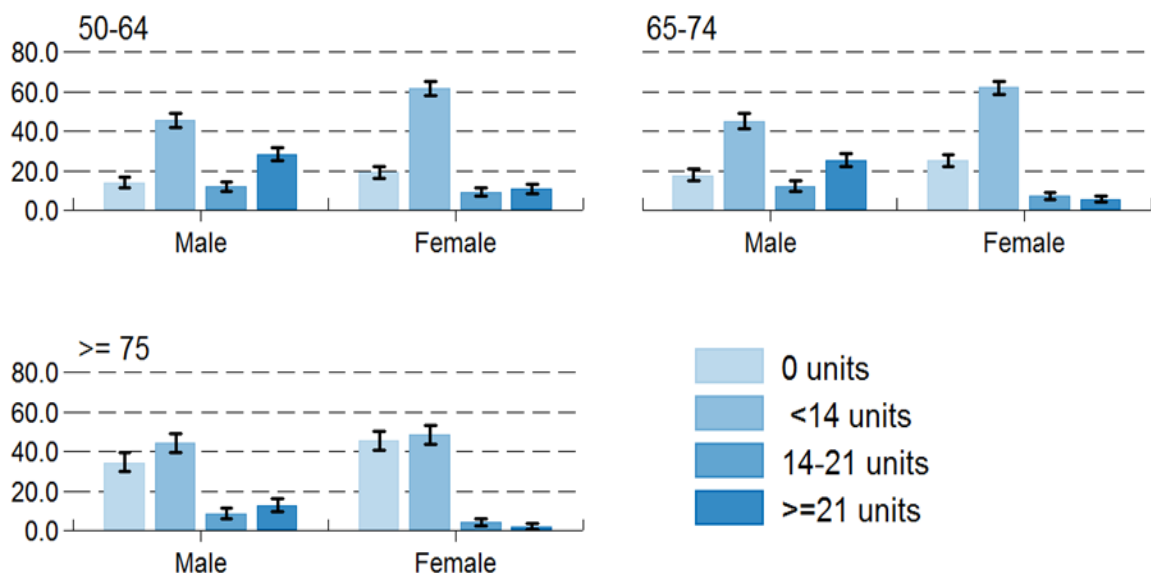
Note. N = 5159; Error bars correspond to 95% confidence in intervals

6.5.2 Alcohol

Alcohol is responsible for a wide range of health and social harms in society and places a significant burden on the resources of the state when dealing with the consequences of its misuse (18). The World Health Organisation reports that the harmful use of alcohol is a causal factor for more than 200 diseases and injury conditions, and can cause death and disability relatively early in life (19). Recently, a new Lancet report stated that contrary to popular beliefs, no amount of alcohol is safe as the risks of cancer and other illnesses outweigh potential benefits (20).

In TILDA, alcohol consumption levels were assessed in the SCQ. At Wave 4, participants were asked if they drink alcohol, what drink they typically consumed, how often they drank alcohol and how much they drank in an average sitting. They were also asked whether they had attempted to cut down their alcohol intake. This information was used to calculate the number of units of alcohol intake per week. At Wave 4, 14% of participants who completed the SCQ questions on alcohol (total n=4,454) reported that they had never consumed alcohol, while 33% reported that they had attempted to cut down their alcohol intake in the last 2 years. Levels of alcohol consumption were higher in men than women at all age groups, while the actual levels of consumption decreased with age (Figure 6.11). It is notable that over 40% of women over the age of 75 drank no alcohol.

Figure 6.11: Prevalence of alcohol intake per week at Wave 4, by age group and sex.

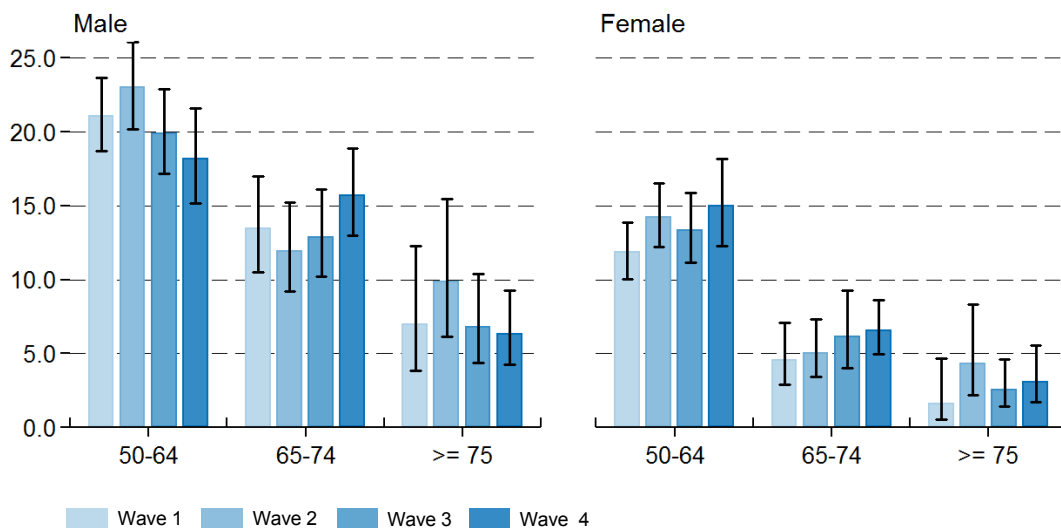


Note. N = 4454; Error bars correspond to 95% confidence intervals

To assess for harmful drinking patterns, participants were asked about their drinking habits using the “Cut down, Annoyed, Guilty, Eye-opener” (CAGE) questionnaire (21), a screening tool for problematic drinking. Questions in the CAGE questionnaire included ‘Have you ever felt you should cut down on your drinking’, ‘Have people annoyed you by criticizing your drinking?’, ‘Have you ever felt bad or guilty about your drinking?’, ‘Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover (eye-opener)?’ A CAGE score of ≥ 2 indicated problem alcohol use.

Figure 6.12 demonstrates the proportion of men and women aged 50 and over in Ireland who reported problematic alcohol use based on the CAGE questionnaire from Waves 1 to 4. Further breakdown of these results can be found in Appendix Table 6.8. Problematic alcohol use was more prevalent in men than women (15% versus 9% at Wave 4) and decreased with age in both genders (Figure 6.13). There was no significant change in the prevalence of alcohol misuse from Wave 1 to Wave 4 (13% to 12%).

Figure 6.12: Prevalence of problematic alcohol use from Waves 1 to 4, by sex and age group.



Note. N = 3826; Error bars correspond to 95% confidence in intervals

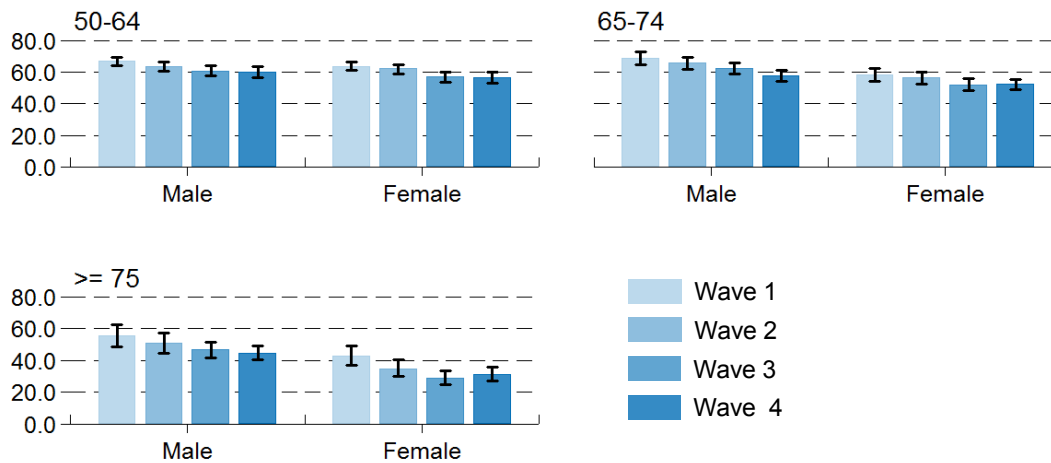
6.5.3 Physical Activity

There is comprehensive evidence that moderate levels of physical activity can help prevent disease, improve quality of life and promote physical and mental health (21). Physical inactivity is recognised by the World Health Organisation as the fourth leading risk factor for global mortality. The *National Guidelines on Physical Activity for Ireland* recommend that all adults take part in at least 150 minutes of moderate activity per week (22). Walking is the most common and accessible activity for older adults and brisk walking for 150 minutes per week is also sufficient to meet the physical activity guidelines.

During the CAPI, participants were asked how many days they walked for at least 10 minutes at a time in the last week and on these days, how many minutes did they spend walking. These results were then used to determine whether participants were meeting the recommended 150 minutes per week. Overall, a large proportion of the TILDA sample (48% at Wave 4) did not walk at least 150 minutes per week. This observation was most

notable in adults aged 75 and older – 63% versus 42% of 50-64 year olds at Wave 4 (Figure 6.14 and Appendix Table 6.8). While women aged 75 and older were less likely to walk at least 150 minutes compared to men (31% versus 45% at Wave 4, Figure 6.13), there was no gender difference in the younger age groups (Figure 6.13).

Figure 6.13: Proportion of older adults walking 150 minutes or more per week at each wave, by sex and age group.



Note. N = 5182; Error bars correspond to 95% confidence in intervals

6.6 Conclusion

There was an overall increase in the prevalence of chronic health conditions across the first four waves of TILDA (average follow-up 6 years). Only participants who were present at all four waves were included in the analysis and they were asked if they have ever suffered from each condition. However, there was a decrease in the number of new cases of certain conditions such as hypertension, cataracts and osteoporosis. The notable increase at Wave 2 may have been augmented, due to feedback on blood pressure and bone density received at the Wave 1 health assessment which may have prompted participants to seek further assessment from their GP.

The most prevalent conditions among adults aged 50 years and over in Ireland were hypertension (38% at Wave 4), arthritis (39% at Wave 4) and pain (35% at Wave 4), each being equivalent to almost half a million adults. Awareness of the proportion of adults with conditions such as hypertension is important, given its association with multiple cardiovascular conditions such as ischaemic heart disease and stroke. Arthritis and pain are commonly disabling for older adults, and awareness of the increasing burden is relevant for planning of care needs in the future, as well as highlighting the need for improving treatment and pain management in these individuals.

Notably, there was an increase in the proportion of participants who reported falling in the last year between Waves 1 and 3. There was no further increase in falls from Wave 3 to Wave 4 which may reflect an increased awareness following a number of public health reports addressing the issue of falls, including reports from TILDA (23). However, falls remain an important public health issue – by Wave 4, 52% of TILDA participants reported at least one fall, equivalent to 660,000 adults in Ireland of this age.

Despite the increased prevalence of chronic conditions, the proportion of adults under 75 years of age who rated their health as Fair or Poor decreased from Wave 1 to Wave 4, however this was not as evident in the 75 and older age group. This may reflect the increased burden of chronic disease in this age group. Social participation, volunteering and caring were associated with the highest levels of self-rated health at Wave 4. Therefore, encouraging social participation amongst older adults may help improve levels of self-rated health.

Encouragingly, there were some improvements evident in health behaviours across the waves. Most notably there was a reduction in the proportion of current smokers (driven largely by females aged 50-64 years), and very low numbers commenced smoking for the first time. Ireland has been progressive in introducing measures to try to reduce smoking, in particular being the first country to introduce a workplace smoking ban. The reduction in smoking could also be due to the 56% increase in the price of cigarettes between Wave 1 and Wave 4. There was no significant change in levels of problem alcohol use, suggesting more public health strategies are required to target this issue. The new *Public Alcohol Bill (2018)* has been officially signed into law and legislates that all alcohol products will now have to feature health warnings including the link between alcohol and cancers. Additionally, new measures such as minimum unit pricing and restrictions on how alcohol is displayed in shops are also forthcoming. The effectiveness of this legislation in reducing alcohol consumption can be examined in future waves of TILDA.

Of concern is the observation that there was an increased proportion of adults aged 50 and over who walked for less than the recommended 150 minutes per week at Wave 4 (48%) compared to Wave 1 (38%). Despite multiple policy initiatives to support increased physical activity, a low proportion of the oldest group (≥ 75 years old) walked at least 150 minutes per week (37% at Wave 4). An increased focus on this specific group is needed to support them in achieving adequate activity levels.

It is important to note that the data presented in this Chapter were based on self-reported information, however a major benefit is that we presented information on health and health behaviours in adults in Ireland across multiple time points. It is envisaged that the longitudinal nature of this data will be a useful resource in health policy and planning for older adults particularly in regards to planning resources for chronic disease and positive behavioural health initiatives.

6.7 References

1. Salive ME. Multimorbidity in older adults. *Epidemiol Rev.* 2013;35:75-83.
2. Department of Health and Children. *Healthy Ireland - A Framework for Improved Health and Well-being 2013-2025.* Government Publications, Dublin, Ireland. 2013.
3. Department of Health and Children. *The National Positive Ageing Strategy.* Government Publications, Dublin, Ireland. 2011.
4. Idler EL, Benyamini Y. Self-rated health and mortality: a review of twenty-seven community studies. *J Health Soc Behav.* 1997;38(1):21-37.
5. Department of Health and Children. *Health in Ireland: Key Trends 2017.* DoH. 2017:<https://health.gov.ie/wp-content/uploads/2018/01/Key-Trends.pdf>.
6. Prince MJ, Wu F, Guo Y, Gutierrez Robledo LM, O'Donnell M, Sullivan R, et al. The burden of disease in older people and implications for health policy and practice. *Lancet.* 2015;385(9967):549-62.
7. Cooper C. Epidemiology of osteoporosis. *Osteoporos Int.* 1999;9 Suppl 2:S2-8.
8. Laird E, Molloy AM, McNulty H, Ward M, McCarroll K, Hoey L, et al. Greater yogurt consumption is associated with increased bone mineral density and physical function in older adults. *Osteoporos Int.* 2017;28(8):2409-19.
9. Prokofyeva E, Wegener A, Zrenner E. Cataract prevalence and prevention in Europe: a literature review. *Acta Ophthalmol.* 2013;91(5):395-405.
10. Guideline for the prevention of falls in older persons. American Geriatrics Society, British Geriatrics Society, and American Academy of Orthopaedic Surgeons Panel on Falls Prevention. *J Am Geriatr Soc.* 2001;49(5):664-72.
11. Bergen G SM, Burns ER. Falls and Fall Injuries Among Adults Aged ≥ 65 Years — United States, 2014. *MMWR Morb Mortal Wkly Rep* 2016;65:993–998.

12. O'Loughlin JL, Robitaille Y, Boivin JF, Suissa S. Incidence of and Risk-Factors for Falls and Injurious Falls among the Community-Dwelling Elderly. *Am J Epidemiol.* 1993;137(3):342-54.
13. Health Service Executive, Department of Health and Children. Strategy to Prevent Falls and Fractures in Ireland's Ageing Population. Report of the National Steering Group on the Prevention of Falls in Older People and the Prevention and Management of Osteoporosis throughout Life,. June 2008.
14. Parker M, Johansen A. Hip fracture. *BMJ.* 2006;333(7557):27-30.
15. Dyer SM, Crotty M, Fairhall N, Magaziner J, Beaupre LA, Cameron ID, et al. A critical review of the long-term disability outcomes following hip fracture. *BMC Geriatr.* 2016;16:158.
16. Wald NJ, Hackshaw AK. Cigarette smoking: an epidemiological overview. *Br Med Bull.* 1996;52(1):3-11.
17. Department of Health. Tobacco Free Ireland. Government Publications, Dublin, Ireland. 2013.
18. Steering Group Report on a National Substance Misuse Strategy. February 2012.
19. WHO. Global status report on alcohol and health. 2014.
20. Collaborators GBDA. Alcohol use and burden for 195 countries and territories, 1990-2016: a systematic analysis for the Global Burden of Disease Study 2016. *Lancet.* 2018;392(10152):1015-35.
21. Mayfield D, McLeod G, Hall P. The CAGE questionnaire: validation of a new alcoholism screening instrument. *Am J Psychiatry.* 1974;131(10):1121-3.
22. Department of Health and Children. Get Active Ireland Guidelines. 2019
23. O'Connell MD, Kenny RA, Donoghue O. Measures of Health and Function that Predict Future Falls? . TILDA Report 2016. 2016;6. Trinity College Dublin 2016. <https://tilda.tcd.ie/publications/reports/pdf/w3-key-findings-report/Chapter%206.pdf>

Appendices

Table 6.1: Self-rated health at Waves 1 to 4, by age group.

	Cataracts (%)	Osteoporosis (%)	Arthritis (%)	Lung Disease (%)	Wrist Fracture (%)	Hip Fracture (%)	Pain (%)	Ever reported a fall (%)	Recurrent Falls	(95% CI)	(95% CI)
50-64											
Wave 1	3 (2.1-4.2)	1 (0.6-1.7)	15.5 (13.4-17.8)	2.9 (2.1-4.1)	13.9 (12.0-16.1)	2.6 (1.7-3.8)	33.6 (30.8-36.6)	17.7 (15.6-20.0)	7.6 (6.2-9.3)		
Wave 2	2.5 (1.7-3.6)	2.6 (1.8-3.7)	19.1 (16.8-21.7)	2.8 (1.9-4.1)	15.4 (13.3-17.8)	2.5 (1.6-3.8)	30.8 (28.1-33.7)	27.2 (24.6-30.1)	7 (5.6-8.8)		
Wave 3	4.4 (3.2-6.0)	3.2 (2.2-4.6)	20.6 (18.0-23.4)	3.2 (2.2-4.8)	16.1 (13.8-18.7)	2.3 (1.4-3.6)	30.1 (27.1-33.1)	35.4 (32.4-38.6)	7.1 (5.6-9.0)		
Wave 4	4.3 (3.0-6.2)	4.5 (3.1-6.4)	22.4 (19.5-25.6)	3.5 (2.3-5.5)	17.4 (14.8-20.4)	2.1 (1.2-3.5)	31.5 (28.1-35.2)	39.3 (35.8-42.8)	5.8 (4.2-7.8)		
Total	3.4 (2.6-4.5)	2.6 (1.9-3.5)	18.9 (16.8-21.2)	3.1 (2.2-4.2)	15.5 (13.4-17.8)	2.4 (1.6-3.5)	31.7 (29.4-33.9)	28.4 (26.1-30.8)	7 (5.9-8.2)		
65-74											
Wave 1	8.6 (6.7-11.1)	2 (1.1-3.5)	27.1 (23.5-31.1)	3.8 (2.4-6.0)	10.2 (8.0-13.0)	3.5 (2.2-5.3)	26.7 (23.2-30.5)	18.4 (15.4-22.0)	7.1 (5.3-9.4)		
Wave 2	9.3 (7.2-12.0)	4 (2.8-5.7)	29.8 (26.4-33.4)	3.6 (2.4-5.5)	10.8 (8.6-13.5)	3.7 (2.4-5.6)	27.8 (24.6-31.3)	31.6 (27.8-35.7)	10.4 (8.3-12.9)		
Wave 3	10.6 (8.6-13.0)	4.8 (3.5-6.6)	32.9 (29.5-36.5)	4.3 (2.9-6.2)	13 (10.5-16.1)	4.3 (2.9-6.3)	29.6 (26.3-33.2)	41.5 (37.6-45.5)	7.9 (6.2-10.1)		
Wave 4	10.2 (8.3-12.5)	5.2 (3.9-6.8)	31.7 (28.5-35.1)	4.8 (3.4-6.8)	13 (10.6-15.8)	4.1 (2.8-6.1)	29.2 (26.0-32.6)	45.1 (41.3-48.9)	8.1 (6.3-10.4)		
Total	9.8 (8.3-11.5)	4.2 (3.2-5.4)	30.7 (28.0-33.5)	4.2 (3.1-5.7)	12 (9.9-14.3)	3.9 (2.8-5.6)	28.5 (26.1-31.0)	35.9 (32.9-39.0)	8.4 (7.1-9.8)		
>= 75											
Wave 1	28.3 (22.6-34.8)	2.6 (1.1-6.0)	30.5 (24.4-37.4)	3 (1.3-6.9)	10.3 (6.7-15.6)	4 (1.9-8.1)	28 (22.0-35.0)	23.3 (17.9-29.8)	5.8 (3.1-10.7)		
Wave 2	21.7 (17.3-26.9)	3.6 (1.9-6.5)	39.8 (34.2-45.8)	3.9 (2.1-7.2)	10.3 (7.1-14.7)	4.1 (2.3-7.3)	30.6 (25.5-36.2)	38.2 (32.7-44.0)	8 (5.3-11.9)		
Wave 3	24.8 (20.7-29.4)	4.3 (2.7-6.8)	39.1 (34.4-44.0)	4.8 (3.0-7.4)	10.7 (7.9-14.2)	5 (3.1-8.0)	29.9 (25.7-34.6)	47.3 (42.5-52.2)	10.8 (8.0-14.5)		
Wave 4	21.2 (17.8-25.1)	5.9 (4.2-8.2)	42 (37.9-46.3)	4.3 (2.8-6.4)	11.3 (8.8-14.5)	5.8 (3.9-8.5)	25.4 (21.9-29.3)	55.1 (50.7-59.3)	11 (8.4-14.3)		
Total	23.5 (20.7-26.5)	4.4 (2.9-6.6)	38.8 (34.6-43.3)	4.1 (2.8-6.0)	10.8 (8.0-14.3)	4.9 (3.2-7.6)	28.2 (25.0-31.6)	44.1 (39.9-48.3)	9.5 (7.6-11.7)		
Total											
Wave 1	7.3 (6.2-8.5)	1.4 (1.0-2.0)	20 (18.2-21.9)	3.1 (2.4-4.0)	12.6 (11.2-14.3)	2.9 (2.2-3.9)	31.3 (29.1-33.7)	18.5 (16.8-20.3)	7.3 (6.1-8.6)		
Wave 2	7.2 (6.1-8.5)	3.1 (2.4-4.0)	25.1 (23.2-27.2)	3.2 (2.5-4.1)	13.3 (11.8-15.0)	3.1 (2.3-4.0)	29.9 (28.0-32.0)	30.1 (28.0-32.2)	8.1 (6.9-9.4)		
Wave 3	10.3 (9.1-11.8)	4 (3.2-4.9)	28.2 (26.2-30.3)	3.9 (3.1-4.9)	14 (12.5-15.7)	3.4 (2.6-4.5)	29.9 (27.8-32.0)	39.7 (37.5-41.9)	8.1 (7.0-9.3)		
Wave 4	10.6 (9.3-12.0)	5.1 (4.2-6.1)	30.6 (28.6-32.7)	4.2 (3.3-5.3)	14.3 (12.8-16.0)	3.7 (2.9-4.8)	29.2 (27.2-31.3)	45.3 (43.1-47.4)	7.9 (6.7-9.3)		
Total	8.9 (7.9-9.9)	3.4 (2.8-4.1)	26 (24.2-27.9)	3.6 (2.9-4.4)	13.6 (12.1-15.2)	3.3 (2.5-4.3)	30.1 (28.5-31.7)	33.4 (31.5-35.3)	7.8 (6.7-9.3)		

Table 6.2: Prevalence of cardiovascular disease at Waves 1 to 4, by sex.

	Hyperten- sion (%)	(95% CI)	Diabetes (%)	(95% CI)	Heart Attack (%)	(95% CI)	Angina (%)	(95% CI)	Stroke (%)	(95% CI)	TIA (%)	(95% CI)	Heart Failure (%)	(95% CI)
Male														
Wave 1	34.3	(32.3-36.3)	9	(7.8-10.4)	5.9	(5.0-7.1)	6	(5.0-7.1)	1.2	(0.8-1.8)	1.8	(1.3-2.5)	1.4	(0.9-2.0)
Wave 2	34.8	(32.7-36.9)	10.2	(9.0-11.6)	7	(5.9-8.2)	4.3	(5.9-8.2)	1.4	(1.0-2.0)	2.7	(2.1-3.4)	1.1	(0.7-1.8)
Wave 3	35.3	(33.2-37.5)	11.5	(10.2-13.0)	8.2	(7.0-9.5)	4.8	(7.0-9.5)	2	(1.5-2.7)	3.6	(2.9-4.4)	1.1	(0.7-1.7)
Wave 4	37.3	(35.1-39.5)	12.8	(11.3-14.3)	9.1	(7.9-10.4)	5.3	(7.9-10.4)	2.4	(1.8-3.1)	4.3	(3.5-5.3)	1.1	(0.7-1.8)
Total	35.4	(33.6-37.3)	10.9	(9.7-12.3)	7.5	(6.5-8.7)	5.1	(6.5-8.7)	1.7	(1.3-2.4)	3.1	(2.5-3.8)	1.2	(0.8-1.7)
Female														
Wave 1	35.9	(34.0-38.0)	6	(5.1-7.1)	1.8	(1.3-2.5)	3.8	(1.3-2.5)	1.2	(0.8-1.8)	1.8	(1.3-2.4)	0.5	(0.3-0.9)
Wave 2	36.1	(34.0-38.2)	7.1	(6.0-8.3)	2.3	(1.7-3.1)	3.6	(1.7-3.1)	1.4	(1.0-2.0)	2.4	(1.8-3.1)	0.4	(0.2-0.8)
Wave 3	36.2	(34.1-38.2)	7.6	(6.5-8.9)	2.7	(2.1-3.6)	3.4	(2.1-3.6)	2	(1.4-2.7)	3.5	(2.8-4.4)	0.5	(0.3-0.9)
Wave 4	39.4	(37.3-41.5)	8.4	(7.2-9.7)	3.2	(2.4-4.1)	3.8	(2.4-4.1)	2.4	(1.8-3.2)	4	(3.2-4.9)	0.6	(0.4-1.1)
Total	36.9	(35.1-38.8)	7.3	(6.3-8.4)	2.5	(1.9-3.3)	3.6	(1.9-3.3)	1.8	(1.3-2.4)	2.9	(2.3-3.7)	0.5	(0.3-0.8)
Total														
Wave 1	35.1	(33.7-36.6)	7.5	(6.7-8.3)	3.8	(3.2-4.5)	4.8	(3.2-4.5)	1.2	(0.9-1.6)	1.8	(1.4-2.2)	0.9	(0.7-1.2)
Wave 2	35.5	(34.0-37.0)	8.6	(7.8-9.4)	4.6	(3.9-5.3)	3.9	(3.9-5.3)	1.4	(1.1-1.8)	2.5	(2.1-3.0)	0.7	(0.5-1.1)
Wave 3	35.8	(34.3-37.2)	9.5	(8.7-10.4)	5.3	(4.7-6.1)	4.1	(4.7-6.1)	2	(1.6-2.5)	3.5	(3.0-4.1)	0.8	(0.5-1.1)
Wave 4	38.4	(36.8-39.9)	10.5	(9.6-11.5)	6	(5.3-6.8)	4.5	(5.3-6.8)	2.4	(2.0-2.9)	4.1	(3.6-4.8)	0.9	(0.6-1.3)
Total	36.2	(34.9-37.5)	9	(8.2-9.8)	4.9	(4.3-5.6)	4.3	(4.3-5.6)	1.7	(1.4-2.2)	3	(2.6-3.5)	0.8	(0.6-1.1)

Table 6.3: Prevalence of cardiovascular disease at Wave 1 to Wave 4, by age group.

	Hypertension (%)	(95% CI)	Diabetes (%)	(95% CI)	Heart Attack (%)	(95% CI)	Angina (%)	(95% CI)	Stroke (%)	(95% CI)	TIA (%)	(95% CI)	Heart Failure (%)	(95% CI)
50-64														
Wave 1	28.9	(27.2-30.6)	5.8	(5.0-6.7)	2.4	(1.9-3.1)	2.3	(1.8-3.1)	0.8	(0.5-1.3)	0.9	(0.6-1.3)	0.8	(0.5-1.2)
Wave 2	28.6	(26.8-30.4)	6.2	(5.3-7.3)	2.6	(2.0-3.4)	1.7	(1.2-2.4)	1	(0.6-1.5)	1.1	(0.7-1.6)	0.8	(0.5-1.3)
Wave 3	27.6	(25.7-29.6)	6.9	(5.8-8.1)	3.1	(2.3-4.1)	1.8	(1.3-2.6)	1.2	(0.8-1.9)	1.4	(0.9-1.9)	0.6	(0.3-1.1)
Wave 4	29.3	(27.1-31.7)	7.7	(6.5-9.2)	3.8	(2.8-5.0)	1.8	(1.2-2.7)	1.4	(0.9-2.2)	1.8	(1.2-2.6)	0.8	(0.4-1.5)
Total	28.6	(27.0-30.2)	6.5	(5.7-7.5)	2.9	(2.3-3.7)	1.9	(1.5-2.6)	1.1	(0.7-1.6)	1.2	(0.9-1.7)	0.7	(0.4-1.2)
65-74														
Wave 1	42.4	(39.6-45.3)	10.7	(9.0-12.6)	5.5	(4.3-7.0)	7.8	(6.2-9.7)	2	(1.4-3.0)	2.1	(1.4-3.2)	1.2	(0.7-2.0)
Wave 2	41.9	(39.2-44.5)	11.9	(10.3-13.7)	6.6	(5.4-8.2)	5.1	(3.9-6.6)	1.8	(1.2-2.7)	3	(2.2-4.0)	0.7	(0.3-1.3)
Wave 3	40.2	(37.8-42.7)	12	(10.5-13.7)	5.7	(4.6-7.2)	4.4	(3.5-5.7)	2.2	(1.6-3.1)	3.9	(3.1-4.9)	0.7	(0.4-1.4)
Wave 4	40.3	(37.9-42.8)	11.8	(10.3-13.4)	5.4	(4.4-6.8)	4.1	(3.2-5.2)	2.1	(1.5-2.9)	3.6	(2.9-4.6)	0.6	(0.3-1.2)
Total	41.1	(39.1-43.1)	11.6	(10.3-13.1)	5.8	(4.8-7.0)	5.1	(4.2-6.3)	2	(1.5-2.8)	3.3	(2.6-4.0)	0.8	(0.5-1.2)
>= 75														
Wave 1	50.7	(46.0-55.4)	9.4	(7.1-12.4)	6.9	(5.0-9.4)	11	(8.3-14.5)	1.5	(0.7-3.0)	5.1	(3.4-7.4)	0.9	(0.4-2.3)
Wave 2	47.6	(43.6-51.7)	10.9	(8.7-13.6)	7.4	(5.7-9.7)	9.1	(6.9-11.9)	2.1	(1.2-3.7)	6.4	(4.7-8.6)	0.7	(0.3-1.8)
Wave 3	46.5	(43.3-49.9)	11.4	(9.5-13.8)	9.5	(7.8-11.6)	8.4	(6.6-10.5)	3.2	(2.2-4.8)	7.7	(6.0-9.8)	1.2	(0.6-2.3)
Wave 4	48.6	(45.5-51.7)	12.8	(10.9-14.9)	10	(8.3-11.9)	9.1	(7.4-11.1)	4.2	(3.1-5.7)	8.2	(6.7-10.1)	1.4	(0.8-2.4)
Total	48.2	(45.2-51.2)	11.4	(9.5-13.6)	8.8	(7.1-10.7)	9.2	(7.5-11.3)	3	(2.1-4.3)	7.1	(5.6-9.0)	1.1	(0.6-1.9)
Total														
Wave 1	35.1	(33.7-36.6)	7.5	(6.7-8.3)	3.8	(3.2-4.5)	4.8	(4.1-5.6)	1.2	(0.9-1.6)	1.8	(1.4-2.2)	0.9	(0.7-1.2)
Wave 2	35.5	(34.0-37.0)	8.6	(7.8-9.4)	4.6	(3.9-5.3)	3.9	(3.3-4.7)	1.4	(1.1-1.8)	2.5	(2.1-3.0)	0.7	(0.5-1.1)
Wave 3	35.8	(34.3-37.2)	9.5	(8.7-10.4)	5.3	(4.7-6.1)	4.1	(3.5-4.8)	2	(1.6-2.5)	3.5	(3.0-4.1)	0.8	(0.5-1.1)
Wave 4	38.4	(36.8-39.9)	10.5	(9.6-11.5)	6	(5.3-6.8)	4.5	(3.9-5.3)	2.4	(2.0-2.9)	4.1	(3.6-4.8)	0.9	(0.6-1.3)
Total	36.2	(34.9-37.5)	9	(8.2-9.8)	4.9	(4.3-5.6)	4.3	(3.8-5.0)	1.7	(1.4-2.2)	3	(2.6-3.5)	0.8	(0.6-1.1)

Table 6.4: Prevalence of non-cardiovascular chronic conditions, falls and fractures at Wave 1 to Wave 4, by age group.

	Cataracts (%)	Osteoporosis (%)	Arthritis (%)	(95% CI)	Lung Disease (%)	(95% CI)	Wrist Fracture (%)	(95% CI)	Hip Fracture (%)	(95% CI)	Pain (%)	(95% CI)	Ever reported a fall (%)	(95% CI)	Recurrent Falls	(95% CI)
50-64																
Wave 1	3.3	6.7	18.7	(5.9-7.6)	3.3	(2.7-4.1)	11.3	(10.1-12.6)	1.8	(1.3-2.5)	36.1	(34.1-38.2)	18.5	(17.0-20.2)	7.4	(6.4-8.6)
Wave 2	3.2	10.2	22.8	(9.1-11.3)	3.7	(3.0-4.7)	12.4	(11.1-13.9)	1.9	(1.4-2.7)	34.4	(32.4-36.5)	30.4	(28.4-32.3)	7.5	(6.5-8.8)
Wave 3	4.9	10.7	25.5	(9.5-12.0)	4.1	(3.2-5.2)	13.8	(12.3-15.5)	1.8	(1.3-2.7)	34.5	(32.3-36.7)	39.6	(37.4-41.8)	8.4	(7.2-9.8)
Wave 4	5.3	12.4	27.1	(10.8-14.1)	4.4	(3.4-5.7)	14.7	(13.0-16.6)	1.9	(1.2-2.9)	33.5	(31.1-35.9)	45.3	(42.7-47.9)	7.9	(6.6-9.4)
Total	4	9.6	23	(8.7-10.6)	3.8	(3.2-4.6)	12.8	(11.5-14.3)	1.9	(1.3-2.6)	34.8	(33.1-36.5)	31.6	(29.9-33.3)	7.8	(7.0-8.6)
65-74																
Wave 1	11.4	11.7	35.1	(9.9-13.8)	4.4	(3.3-6.0)	10.4	(8.8-12.3)	2.5	(1.7-3.6)	35.6	(32.6-38.7)	21.3	(18.7-24.1)	7.4	(6.0-9.2)
Wave 2	12.7	17.6	39.2	(15.8-19.6)	4.6	(3.6-6.0)	11.4	(9.8-13.3)	2.4	(1.7-3.5)	35.1	(32.4-37.8)	36.5	(33.9-39.2)	10	(8.5-11.7)
Wave 3	13.8	17.3	41.1	(15.5-19.2)	5.1	(4.1-6.4)	12.8	(11.1-14.8)	3	(2.2-4.1)	35.3	(32.7-37.9)	46.2	(43.6-48.7)	9.2	(7.8-10.7)
Wave 4	13.7	17.8	40.2	(16.1-19.6)	5.9	(4.7-7.2)	12.9	(11.3-14.7)	2.9	(2.1-4.0)	35.1	(32.8-37.5)	51.4	(48.8-53.9)	7.9	(6.6-9.3)
Total	13.1	16.4	39.2	(15.0-18.0)	5.1	(4.2-6.2)	12.1	(10.6-13.7)	2.7	(2.1-3.6)	35.2	(33.3-37.2)	40.6	(38.6-42.7)	8.6	(7.7-9.6)
>= 75																
Wave 1	32.7	17.5	42.7	(14.3-21.2)	4	(2.5-6.3)	13.7	(10.9-17.1)	3.9	(2.5-6.2)	38.3	(33.7-43.2)	24	(20.1-28.4)	7.3	(5.1-10.2)
Wave 2	24.8	21.7	51	(18.6-25.2)	5.4	(3.8-7.6)	14.4	(11.8-17.5)	4.6	(3.2-6.7)	39.5	(35.5-43.7)	41.1	(37.1-45.3)	10.1	(7.7-13.1)
Wave 3	30	23.1	51.3	(20.3-26.1)	5.8	(4.4-7.7)	14.6	(12.3-17.3)	5.3	(4.0-7.2)	37.9	(34.5-41.4)	54.9	(51.4-58.5)	14.1	(11.8-16.8)
Wave 4	27.1	23.6	52.8	(21.1-26.3)	5.5	(4.3-7.1)	15.3	(13.3-17.7)	5.7	(4.4-7.5)	38.3	(35.4-41.3)	60.7	(57.6-63.6)	13.5	(11.4-16.0)
Total	28.4	22	50.2	(19.4-24.8)	5.3	(4.1-6.8)	14.7	(12.4-17.3)	5.1	(3.8-6.7)	38.5	(35.8-41.2)	48.4	(45.4-51.4)	11.8	(10.3-13.6)
Total																
Wave 1	9.3	9.3	26	(8.5-10.3)	3.7	(3.1-4.4)	11.5	(10.5-12.5)	2.3	(1.8-2.8)	36.3	(34.6-38.0)	19.9	(18.6-21.3)	7.4	(6.6-8.3)
Wave 2	9.5	14.2	32.1	(13.2-15.2)	4.3	(3.6-5.0)	12.5	(11.5-13.6)	2.5	(2.0-3.1)	35.5	(33.9-37.0)	33.9	(32.3-35.4)	8.6	(7.8-9.6)
Wave 3	13.2	15.5	36.1	(14.5-16.6)	4.8	(4.2-5.5)	13.7	(12.6-14.8)	3	(2.4-3.6)	35.5	(33.9-37.1)	45	(43.4-46.6)	9.9	(9.0-10.8)
Wave 4	14.1	17.3	38.6	(16.2-18.5)	5.2	(4.6-6.0)	14.2	(13.2-15.4)	3.3	(2.7-4.0)	35.3	(33.8-36.9)	51.5	(49.9-53.1)	9.4	(8.5-10.4)
Total	11.5	14.1	33.2	(13.2-15.0)	4.5	(4.0-5.1)	13	(11.9-14.0)	2.8	(2.3-3.4)	35.6	(34.4-36.9)	37.6	(36.2-38.9)	8.8	(8.2-9.5)

Table 6.5: Prevalence of non-cardiovascular chronic conditions, falls and fractures at Wave 1 to Wave 4, by age group in men.

	Cataracts (%)	Osteoporosis (%)	Arthritis (%)	Lung Disease (%)	Wrist Fracture (%)	Hip Fracture (%)	Pain (%)	(95% CI)	Ever reported a fall (%)	Recurrent Falls	(95% CI)
50-64											
Wave 1	3	1	15.5	2.9	13.9	2.6	33.6	(1.7-3.8)	17.7	7.6	(15.6-20.0)
Wave 2	2.5	2.6	19.1	2.8	15.4	2.5	30.8	(1.6-3.8)	27.2	7	(24.6-30.1)
Wave 3	4.4	3.2	20.6	3.2	16.1	2.3	30.1	(1.4-3.6)	35.4	7.1	(32.4-38.6)
Wave 4	4.3	4.5	22.4	3.5	17.4	2.1	31.5	(1.2-3.5)	39.3	5.8	(35.8-42.8)
Total	3.4	2.6	18.9	3.1	15.5	2.4	31.7	(1.6-3.5)	28.4	7	(26.1-30.8)
65-74											
Wave 1	8.6	2	27.1	3.8	10.2	3.5	26.7	(2.2-5.3)	18.4	7.1	(15.4-22.0)
Wave 2	9.3	4	29.8	3.6	10.8	3.7	27.8	(2.4-5.6)	31.6	10.4	(27.8-35.7)
Wave 3	10.6	4.8	32.9	4.3	13	4.3	29.6	(2.9-6.3)	41.5	7.9	(37.6-45.5)
Wave 4	10.2	5.2	31.7	4.8	13	4.1	29.2	(2.8-6.1)	45.1	8.1	(41.3-48.9)
Total	9.8	4.2	30.7	4.2	12	3.9	28.5	(2.8-5.6)	35.9	8.4	(32.9-39.0)
>= 75											
Wave 1	28.3	2.6	30.5	3	10.3	4	28	(1.9-8.1)	23.3	5.8	(17.9-29.8)
Wave 2	21.7	3.6	39.8	3.9	10.3	4.1	30.6	(2.3-7.3)	38.2	8	(32.7-44.0)
Wave 3	24.8	4.3	39.1	4.8	10.7	5	29.9	(3.1-8.0)	47.3	10.8	(42.5-52.2)
Wave 4	21.2	5.9	42	4.3	11.3	5.8	25.4	(3.9-8.5)	55.1	11	(50.7-59.3)
Total	23.5	4.4	38.8	4.1	10.8	4.9	28.2	(3.2-7.6)	44.1	9.5	(39.9-48.3)
Total											
Wave 1	7.3	1.4	20	3.1	12.6	2.9	31.3	(2.2-3.9)	18.5	7.3	(16.8-20.3)
Wave 2	7.2	3.1	25.1	3.2	13.3	3.1	29.9	(2.3-4.0)	30.1	8.1	(28.0-32.2)
Wave 3	10.3	4	28.2	3.9	14	3.4	29.9	(2.6-4.5)	39.7	8.1	(37.5-41.9)
Wave 4	10.6	5.1	30.6	4.2	14.3	3.7	29.2	(2.9-4.8)	45.3	7.9	(43.1-47.4)
Total	8.9	(7.9-9.9)	26	3.6	(2.9-4.4)	13.6	(2.5-4.3)	3.3	(28.5-31.7)	33.4	(31.5-35.3)
											7.8

Table 6.6: Prevalence of non-cardiovascular chronic conditions, falls and fractures at Wave 1 to Wave 4, by age group in women.

	Cataracts (%)	Osteoporosis (95% CI)	Arthritis (95% CI)	Lung Disease (%)	Wrist Fracture (95% CI)	Hip Fracture (95% CI)	Pain (%)	Ever reported a fall (%)	Recurrent Falls (%)	(95% CI)								
50-64																		
Wave 1	3.6	(2.7-4.7)	12.4	(10.8-14.1)	22	(20.0-24.1)	3.7	(2.8-4.8)	8.7	(7.4-10.3)	1.1	(0.6-1.9)	38.6	(35.9-41.3)	19.3	(17.2-21.6)	7.2	(5.9-8.8)
Wave 2	3.9	(3.0-5.1)	17.7	(15.9-19.7)	26.4	(24.1-28.8)	4.7	(3.5-6.1)	9.4	(7.9-11.2)	1.4	(0.8-2.4)	38	(35.3-40.8)	33.4	(30.8-36.2)	8.1	(6.6-9.8)
Wave 3	5.5	(4.2-7.1)	18.2	(16.1-20.5)	30.5	(27.7-33.4)	4.9	(3.7-6.6)	11.5	(9.7-13.7)	1.4	(0.8-2.6)	38.9	(35.9-41.9)	43.7	(40.7-46.7)	9.7	(8.0-11.8)
Wave 4	6.1	(4.7-8.1)	20	(17.5-22.8)	31.7	(28.6-34.9)	5.3	(3.8-7.2)	12	(9.9-14.5)	1.7	(1.0-3.2)	35.3	(32.2-38.5)	51.1	(47.6-54.6)	9.9	(7.9-12.4)
Total	4.6	(3.7-5.6)	16.6	(15.0-18.3)	26.9	(24.9-29.1)	4.5	(3.6-5.7)	10.2	(8.7-11.9)	1.4	(0.8-2.4)	37.9	(35.7-40.2)	34.7	(32.4-37.1)	8.5	(7.4-9.8)
65-74																		
Wave 1	14.1	(11.5-17.1)	20.7	(17.5-24.3)	42.7	(38.7-46.7)	5.1	(3.4-7.5)	10.6	(8.3-13.4)	1.5	(0.7-3.1)	43.9	(39.8-48.1)	24	(20.2-28.1)	7.8	(5.8-10.4)
Wave 2	15.9	(13.4-18.8)	30.4	(27.2-33.9)	48.1	(44.2-52.0)	5.6	(4.0-7.8)	12	(9.8-14.7)	1.2	(0.6-2.5)	41.9	(38.2-45.7)	41.1	(37.4-44.9)	9.6	(7.6-12.1)
Wave 3	16.9	(14.4-19.7)	29.3	(26.2-32.5)	49	(45.4-52.6)	6	(4.5-7.9)	12.6	(10.5-15.2)	1.8	(1.0-3.1)	40.7	(37.2-44.3)	50.7	(47.3-54.0)	10.4	(8.4-12.7)
Wave 4	17.2	(14.9-19.8)	30.3	(27.4-33.3)	48.7	(45.5-51.9)	6.9	(5.3-8.9)	12.9	(10.9-15.3)	1.8	(1.1-2.9)	41	(37.8-44.3)	57.6	(54.5-60.6)	7.6	(5.9-9.7)
Total	16.2	(14.4-18.2)	28.2	(25.7-30.8)	47.4	(44.5-50.3)	6	(4.7-7.6)	12.2	(10.3-14.3)	1.6	(1.0-2.6)	41.7	(39.1-44.4)	45.2	(42.5-47.8)	8.8	(7.7-10.2)
>= 75																		
Wave 1	35.7	(29.9-41.8)	27.6	(22.5-33.3)	50.9	(44.5-57.3)	4.6	(2.6-8.0)	15.9	(12.1-20.7)	3.9	(2.1-7.1)	45.3	(39.2-51.6)	24.4	(19.4-30.3)	8.3	(5.4-12.6)
Wave 2	27.1	(22.3-32.4)	34.8	(29.8-40.3)	59	(53.3-64.5)	6.4	(4.1-9.9)	17.4	(13.7-21.8)	4.9	(3.0-8.0)	46	(40.4-51.8)	43.3	(37.8-48.9)	11.6	(8.3-16.0)
Wave 3	33.8	(29.3-38.7)	37.1	(32.6-41.9)	60.5	(55.5-65.2)	6.7	(4.7-9.5)	17.6	(14.3-21.5)	5.6	(3.7-8.2)	43.9	(38.9-48.9)	60.7	(55.6-65.6)	16.5	(13.3-20.4)
Wave 4	31.8	(28.1-35.8)	37.7	(33.5-42.1)	61.4	(57.0-65.7)	6.5	(4.7-8.9)	18.5	(15.5-22.0)	5.7	(4.0-8.1)	48.5	(44.2-52.9)	65.1	(60.8-69.2)	15.6	(12.6-19.1)
Total	32.1	(29.1-35.2)	35.1	(30.9-39.5)	58.7	(54.2-63.1)	6.2	(4.5-8.5)	17.6	(14.3-21.3)	5.2	(3.5-7.6)	46.1	(42.4-49.9)	51.7	(47.5-55.8)	13.6	(11.4-16.3)
Total																		
Wave 1	11.1	(9.8-12.6)	16.7	(15.2-18.3)	31.5	(29.5-33.5)	4.2	(3.4-5.2)	10.4	(9.1-11.7)	1.6	(1.1-2.3)	40.9	(38.8-43.1)	21.2	(19.4-23.1)	7.5	(6.4-8.8)
Wave 2	11.6	(10.2-13.1)	24.4	(22.7-26.2)	38.5	(36.4-40.6)	5.3	(4.3-6.4)	11.7	(10.4-13.1)	2	(1.4-2.8)	40.6	(38.5-42.7)	37.4	(35.4-39.5)	9.2	(8.0-10.5)
Wave 3	15.8	(14.3-17.5)	26.2	(24.4-28.1)	43.5	(41.4-45.5)	5.7	(4.7-6.8)	13.3	(12.0-14.8)	2.5	(1.9-3.4)	40.7	(38.6-42.8)	49.9	(47.8-52.0)	11.5	(10.2-13.0)
Wave 4	17.3	(15.8-18.9)	28.6	(26.8-30.5)	46	(43.9-48.1)	6.2	(5.2-7.3)	14.2	(12.8-15.7)	2.9	(2.2-3.8)	41	(38.8-43.2)	57.3	(55.3-59.3)	10.8	(9.5-12.3)
Total	14	(12.9-15.1)	24	(22.4-25.6)	39.9	(38.0-41.7)	5.3	(4.5-6.3)	12.4	(11.1-13.8)	2.3	(1.7-3.0)	40.8	(39.1-42.5)	41.5	(39.7-43.2)	9.8	(8.9-10.7)

Table 6.7: Smoking status at Wave 1 to Wave 4, by age group.

	Never		Past		Current		Total	Number in sample
	%	95% CI	%	95% CI	%	95% CI		
50-64								
Wave 1	42	(40-44)	36	(34-37)	23	(21-24)	100	3274
Wave 2	43	(41-45)	35	(33-37)	22	(20-24)	100	2779
Wave 3	41	(39-43)	40	(38-42)	19	(17-21)	100	2392
Wave 4	42	(39-44)	41	(38-43)	18	(16-20)	100	1922
65-74								
Wave 1	44	(41-47)	41	(38-44)	15	(13-18)	100	1372
Wave 2	45	(42-48)	42	(39-45)	13	(11-15)	100	1547
Wave 3	43	(40-45)	45	(42-47)	13	(11-15)	100	1773
Wave 4	42	(39-44)	44	(42-47)	14	(12-16)	100	1970
>= 75								
Wave 1	50	(45-55)	43	(38-48)	7	(5-10)	100	546
Wave 2	50	(46-54)	43	(39-47)	7	(5-10)	100	727
Wave 3	49	(46-53)	43	(39-46)	8	(6-10)	100	1029
Wave 4	48	(44-51)	45	(42-48)	7	(6-9)	100	1305
Total								
Wave 1	43	(42-45)	38	(36-39)	19	(17-20)	100	5200
Wave 2	45	(43-46)	38	(37-40)	17	(16-18)	100	5054
Wave 3	43	(42-45)	42	(40-44)	15	(13-16)	100	5197
Wave 4	43	(42-45)	43	(42-45)	13	(12-15)	100	5197

Table 6.8: Problem alcohol use at Wave 1 to Wave 4, by age group.

	Never		Past		Current		Total	Number in sample
	%	95% CI	%	95% CI	%	95% CI		
50-64								
Wave 1	83	(82-85)	17	(15-18)	100	2900	100	3274
Wave 2	81	(79-83)	19	(17-21)	100	2454	100	2779
Wave 3	83	(81-84)	17	(16-19)	100	2051	100	2392
Wave 4	82	(80-84)	18	(16-20)	100	1630	100	1922
65-74								
Wave 1	91	(89-93)	9	(7-11)	100	1247	100	1372
Wave 2	91	(89-93)	9	(7-11)	100	1382	100	1547
Wave 3	90	(88-92)	10	(8-12)	100	1550	100	1773
Wave 4	89	(87-90)	11	(10-13)	100	1726	100	1970
>= 75								
Wave 1	96	(94-97)	4	(3-6)	100	490	100	546
Wave 2	93	(91-95)	7	(5-9)	100	588	100	727
Wave 3	95	(93-97)	5	(3-7)	100	809	100	1029
Wave 4	95	(94-97)	5	(3-6)	100	1057	100	1305
Total								
Wave 1	87	(86-88)	13	(12-14)	100	4643	100	5200
Wave 2	86	(85-87)	14	(13-15)	100	4425	100	5054
Wave 3	88	(87-89)	12	(11-13)	100	4412	100	5197
Wave 4	88	(87-89)	12	(11-13)	100	4416	100	5197

Table 6.9: Proportion of adults who walked ≥ 150 minutes per week at Wave 1 to Wave 4, by age group.

	<150 mins per week		≥ 150 mins per week		Total	Number in sample
	%	95% CI	%	95% CI		
50-64						
Wave 1	35	(33-37)	65	(63-67)	100	3274
Wave 2	37	(35-39)	63	(61-65)	100	2882
Wave 3	41	(39-43)	59	(57-61)	100	2364
Wave 4	42	(39-44)	58	(56-61)	100	1922
65-74						
Wave 1	37	(34-40)	63	(60-66)	100	1372
Wave 2	39	(36-42)	61	(58-64)	100	1580
Wave 3	43	(40-46)	57	(54-60)	100	1759
Wave 4	45	(43-47)	55	(53-57)	100	1970
≥ 75						
Wave 1	52	(47-57)	48	(43-53)	100	546
Wave 2	58	(54-62)	42	(38-46)	100	737
Wave 3	63	(60-67)	37	(33-40)	100	1019
Wave 4	63	(60-66)	37	(34-40)	100	1305
Total						
Wave 1	38	(36-39)	62	(61-64)	100	5200
Wave 2	41	(39-43)	59	(57-61)	100	5200
Wave 3	46	(45-48)	54	(52-55)	100	5144
Wave 4	48	(47-50)	52	(50-53)	100	5197