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Living with Frailty in Ireland 2018

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Key Findings

- Frailty is not a diagnosis and can be driven by different factors in different individuals. The two most common operationalisations of frailty are the physical frailty phenotype (FP) and the frailty index (FI) or accumulation of health deficits.
- The information presented in this chapter utilises frailty as measured by the FI and is based on cross-sectional analyses of TILDA participants from Wave 5 (2018).
- Frailty is common, affecting 18% of adults aged 58 years and over, 22% aged 65 years and over and 33.3% aged 75 years and over in Ireland.
- The prevalence of frailty among women is almost twice that of men (22% versus 13%) and increases with age in both sexes.
- Frailty is three times more prevalent at lower levels of educational attainment: 29% for primary level versus 10% for third level.
- Among those aged 58 years and over, 10% are living alone, of whom 23% live alone with frailty. Among those aged 75 years and over who live alone, 44% have frailty.
- Half of adults aged 58 years and over living with frailty also have a disability in either basic or instrumental activities of daily living.
- People living with frailty are more likely to experience lower levels of cognitive function at all age groups.
- Among adults aged 75 years and over living with frailty:
 - 47% do not receive any form of informal care or formal community support
 - 36% receive informal care from a family member or friend
 - 38% receive formal community support services
 - 16% receive both informal care and formal community support services
 - 12% pay for private home help or a personal care attendant
 - 17% receive public home help
 - 10% receive public personal care attendant
 - 4% receive public meals-on-wheels
 - 4% are in receipt of a home care package

- 55% of adults aged 75 years and older who live with frailty self-rate their health as excellent, very good or good.
- Frailty is not inevitable and can be avoided, delayed and reversed with timely and appropriate interventions, both at the individual and population levels.

3.1 Introduction

3.1.1 Background

Frailty is described as a distinctive health state related to the ageing process in which multiple body systems gradually lose their inbuilt reserves. Frailty is not a medical diagnosis, and it can have different drivers in different individuals. Older adults living with frailty are at an increased risk of unpredictable deterioration in their health following exposure to insults such as COVID-19 infection. (1,2) Frailty is a common condition in older adults, although it is not an inevitable part of the ageing process. (3) Frailty can occur at any age, but it becomes more prevalent with advancing age. (4) This association with increasing age has implications for Ireland in terms of the impact of COVID-19 on medically vulnerable adults aged 70 years and over. On March 28th 2020, the Irish Government implemented new HSE 'Guidance on cocooning to protect people over 70 years and those extremely medically vulnerable from COVID-19'. (5) In the UK, the National Institute for Health in Care Excellence (NICE) has published rapid COVID-19 guidelines for the management of patients in critical care. (6) NICE advises that all patients, irrespective of COVID-19 status, should on admission to hospital be assessed for frailty. Patients classified as having frailty should then be assessed as to their appropriateness for critical care escalation. Even in the absence of a universally accepted operationalisation, the concept of frailty is becoming a key concept in healthcare service planning development and delivery for our ageing population (7,8), particularly during the ongoing COVID-19 pandemic. In a large population of patients admitted to hospital with COVID-19, duration of hospital stay and mortality outcomes were better predicted by frailty than either age or comorbidity. (9) Even though the measurement of frailty may have advantages from the point of view of medical risk stratification and planning of healthcare delivery, the public's perceptions of frailty are generally negative and many older people with multimorbidity and disability do not identify themselves as frail. (10)

Frailty is a dynamic process that changes over time and can be viewed on a continuum. An older person can transition in either direction between the different states of frailty, namely robustness or non-frailty, pre-frailty (an intermediate sub-clinical state) and frailty. (11) Older people who are not frail may have some health problems, but in general these problems are being well managed. Older people with pre-frailty are at an increased risk of adverse outcomes but are living independently. Individuals living with frailty generally require some support for instrumental and/or basic activities of daily living, have increased susceptibility to infection, take longer to recover from infections and are less likely to recover to previous levels of functional independence. For older adults living with frailty, exposure to a stressor such as infection significantly increases the risk of disability,

hospital admission, longer in-patient length of stay, transition to long-term care and death. (12) Individuals living with frailty who contract COVID-19 are at greatest risk for admission to hospital, admission to critical and intensive care units and death. (9,13) Identifying people living with frailty provides an opportunity to prevent this at-risk group from contracting COVID-19 in the community and proactively to develop healthcare service planning and delivery for this medically vulnerable population. (14)

Although frailty is a recognisable and common phenomenon in ageing, it is difficult to define accurately. Frailty is not a medical diagnosis because it can have different drivers (and hence different underlying diagnoses) in different people. The gold standard for the assessment and management of frailty is Comprehensive Geriatric Assessment (CGA). CGA is a holistic and interdisciplinary assessment of an individual and has been demonstrated to reduce adverse outcomes including disability, cognitive decline, long-term residential care and death. (15) CGA however is time-consuming and may be unfeasible in emergency care settings where the medical management of high illness acuity is the immediate priority.

Despite a lack of agreement on an internationally accepted and easily administered consensus measure of frailty, several methods of screening are commonly used. (16,17) One method is the Frailty Phenotype (FP) model (also referred to as the physical FP), which views frailty as the presence of three or more of the following characteristics: unintended weight loss, exhaustion, weakness, slow gait speed and low physical activity. A person is considered pre-frail if they have 1-2 characteristics and robust if they have none of these characteristics. (1, 12) A person can be pre-frail at the expense of different components, and this may carry different prognostic implications. (18)

The second method is the Cumulative Deficits or Frailty Index (FI) model, which views frailty as a state of system breakdown due to the accumulation of physical and psychological health symptoms and conditions, described as health deficits. An FI measures the number of health deficits present as a proportion of the total number of potential health deficits tested to determine whether a person is in robust health, living with pre-frailty or living with frailty. (19, 20) FI cut-offs have been employed for the classification into robust, pre-frail and frail, but again each of those categories can be heterogeneous from the point of view of people's individual deficits.

Population-based cohort studies such as TILDA commonly use the FP and the FI to measure frailty in large, population-representative samples and to explore relationships between frailty and potential risk factors and health outcomes. In April 2020, TILDA published a report using data on FP from Wave 5 of the study to inform demographics for over 50s in Ireland during the COVID-19 pandemic. (21) The information presented in this

chapter utilises frailty as measured by the FI and is based on cross-sectional analyses of TILDA participants from Wave 5 (2018). This use of the FI in this chapter is consistent with the Chapter from the TILDA report published in November 2018 that examined the prevalence, incidence and health outcomes of frailty in adults aged 50 years and over, across Waves 1-4 (2009-2016) of the TILDA study. (22)

This report provides an overview of people living in the community in Ireland aged 58 years and over classified by FI status from TILDA Wave 5. To assist with both COVID-specific and wider ongoing non-COVID-19 healthcare policy and service planning, the analyses identify cohorts based on current national and international data for at-risk groups such as those living with frailty and pre-frailty; those who live alone; those who have a disability; and those who may have unmet need when it comes to informal care and accessing community support services.

3.1.2 Sample

Data for this chapter come from Wave 5 (2018) of the TILDA study. These data were collected through the computer-assisted personal interview (CAPI) between 16th January 2018 and 31st December 2018. Of the 8,504 participants aged 50 years and older in TILDA at Wave 1, 3,279 did not participate in Wave 5, leaving a sample of n=5,225. We removed from our analysis any participant aged less than 58 years of age (n=209) and those participants who were not present at Wave 1 (n=108). Thus, the analytical sample included n=4,908 participants aged 58 years and older at Wave 5. The average age was 70.5 years, with an age range of 58–103 years.

3.1.3 Methodology

An earlier chapter (Chapter 2) provides a detailed description of the methodology. Thus, a summary of the methodology used in this chapter is provided here. We use attrition weights as described in Chapter 2, to make estimates relevant to the general population aged 58 years and over in Ireland. There are seven sections in our analysis. Firstly, we examine the prevalence of frailty and distribution by sociodemographic factors (age, gender, educational attainment and living alone). Next, we focus on health outcomes related to frailty, namely disability and global cognitive function. Then, we examine the levels of informal care and formal community support services, which support ageing in place and are received by adults living with frailty. Finally, we explore how older people living with frailty perceive and rate their own physical health. We provide descriptive data for the population aged 58 years and over and disaggregate by age group (58-64 years, 65-74 years and 75 years or over). A detailed description of these topics and the measures used in these analyses is provided at the start of each section.

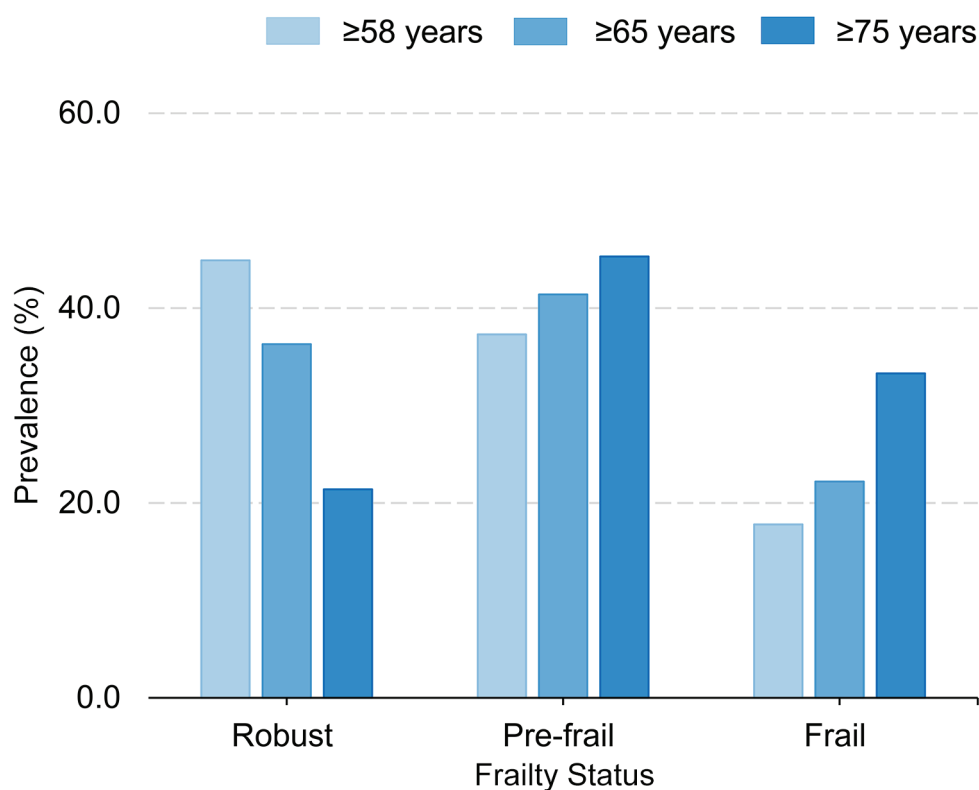
3.2 The Prevalence of Frailty

A deficit accumulation FI is constructed using 31 self-reported health deficits collected during the TILDA home interview at Wave 5, following the previously published methodology. (17, 18, 23) The 31 deficits are associated with poor health, are distributed across several health domains and are associated with advancing age. Each deficit is coded as present (1) or absent (0). Deficits with more than two categories are coded as a proportion of the number and order of responses e.g. five answer categories for self-rated physical health deficit: Excellent, Very good and Good are coded as 0 (no deficit); Fair is coded as 0.5 (partial deficit) and Poor is 1.0 (full deficit).. The total is then summed and divided by 31. This produces FI scores between 0.0 and 1.0. Scores of <0.10, 0.10-0.24 and ≥ 0.25 are used to classify participants respectively as robust, pre-frail and frail.

The 31 deficits included in the FI at Wave 5 are listed in appendix 3.1. In previous waves, 32 deficits had been used to calculate the FI, but one of these was not collected at Wave 5. A comparison of the 31 and 32-item FI at Wave 4 shows the FIs are highly correlated, with a coefficient of 0.98, representing a 1% underestimation on the proportion categorised as frail.

The prevalence, or the proportion of the community-dwelling population aged 58 years and over, by FI frailty status at Wave 5, is provided in Figure 3.1. The prevalence of frailty is 18%, while pre-frailty is highly prevalent at 37%. Correspondingly, the prevalence of robustness is 45% at Wave 5. These data indicate that frailty and pre-frailty are common among older adults in Ireland, corresponding to one-in-six and one-in-three adults, respectively. The prevalence of pre-frailty and frailty in those aged 65 years and over is 41% and 22%, while among those aged 75 years and over the prevalence of pre-frailty and frailty is 45% and 33%, respectively.

Figure 3.1. Prevalence of frailty status (robust, pre-frail and frail) at Wave 5 using the FI measure



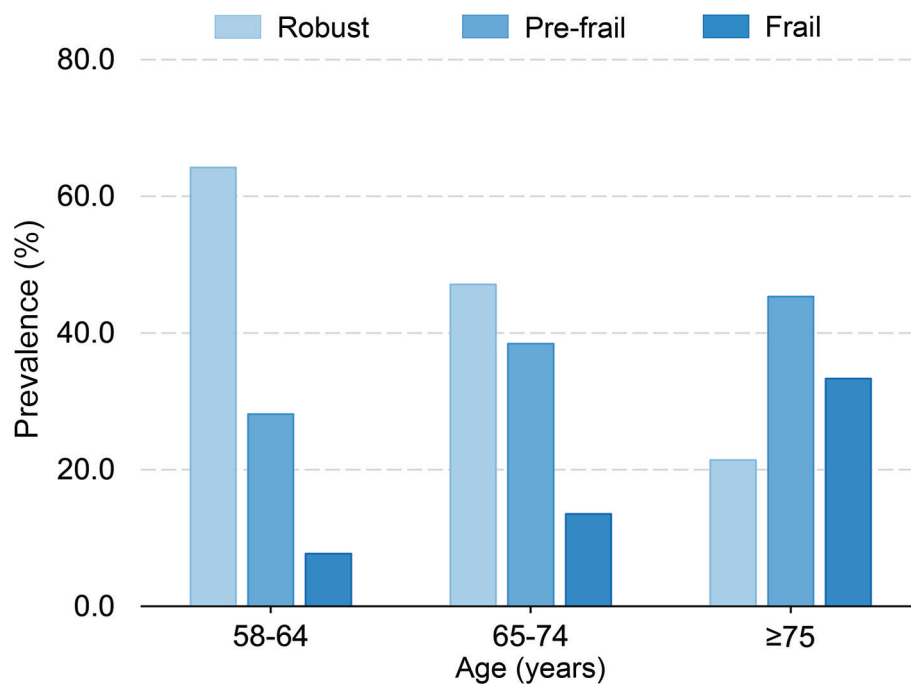
3.3 Socio-demographics and frailty

The development of frailty at older ages is related to demographic and social factors that are determined much earlier during the life-course. Here we examine the association with frailty of self-reported demographic and social data including age, gender and highest level of educational attainment provided by participants during the home interview.

3.3.1 Age and frailty

Among the 4,908 TILDA participants aged 58 years and over at Wave 5, 31% are in the 58-64 age group, 39% are in the 65-74 age group and 30% are aged 75 years and over. The prevalence of frailty and pre-frailty increases with advancing age in all age groups, as summarised in Figure 3.2. There is a progressive increase in the prevalence of frailty across the three age groups, from 8% to 14% to 33%. A smaller increase in prevalence across the age groups is observed for pre-frailty, from 28% to 38% to 45%. These data support the well-documented relationship between increased frailty and advancing age.

Figure 3.2. Age and frailty at Wave 5 using the FI measure



3.3.2 Gender and frailty

Among the TILDA participants aged 58 years and over at Wave 5, 52% are women. The prevalence of frailty among women is higher, at 22% compared to 13% in men aged 58 years and over. Among women, the prevalence of frailty is approximately twice that of men in the younger (58-64 year) and older (75 years and over) age groups, as summarised in Table 3.1. Correspondingly, the prevalence of robustness is lower among women at all age groups. The prevalence of pre-frailty tends to fluctuate among men and women at different age groups, with a lower prevalence among women in the youngest and oldest age groups. These data support the documented relationship between increasing prevalence of frailty among women compared to men, known as the ‘male-female health-survival paradox’.

Table 3.1. Gender, age and frailty at Wave 5 using the FI measure

Age	58-64 years			65-74 years			75+ years		
	Robust	Pre-frail	Frail	Robust	Pre-frail	Frail	Robust	Pre-frail	Frail
Men (%)	66	29	5	53	35	12	28	48	24
Women (%)	62	27	11	43	42	15	16	43	41

3.3.3 Education and frailty

Among the older adult population, 27% attained primary level education, 46% attained secondary education and 27% attained third level education. In the youngest age group, frailty is twice as prevalent among those who attained a primary versus secondary level education. The prevalence of frailty is also three times higher among those educated to primary only compared to third level education, as summarised in Table 3.2. A similar pattern was observed in the 65-74 age group. In general, the prevalence of frailty is higher among adults aged 75 years and over, but once again those who had attained a primary level education only had the highest prevalence of frailty compared to those educated to secondary or third level. The prevalence of pre-frailty is also highest among those with a primary level education, but the difference in prevalence decreases with increasing age.

Table 3.2. Highest level of educational attainment and frailty at Wave 5 using the FI measure

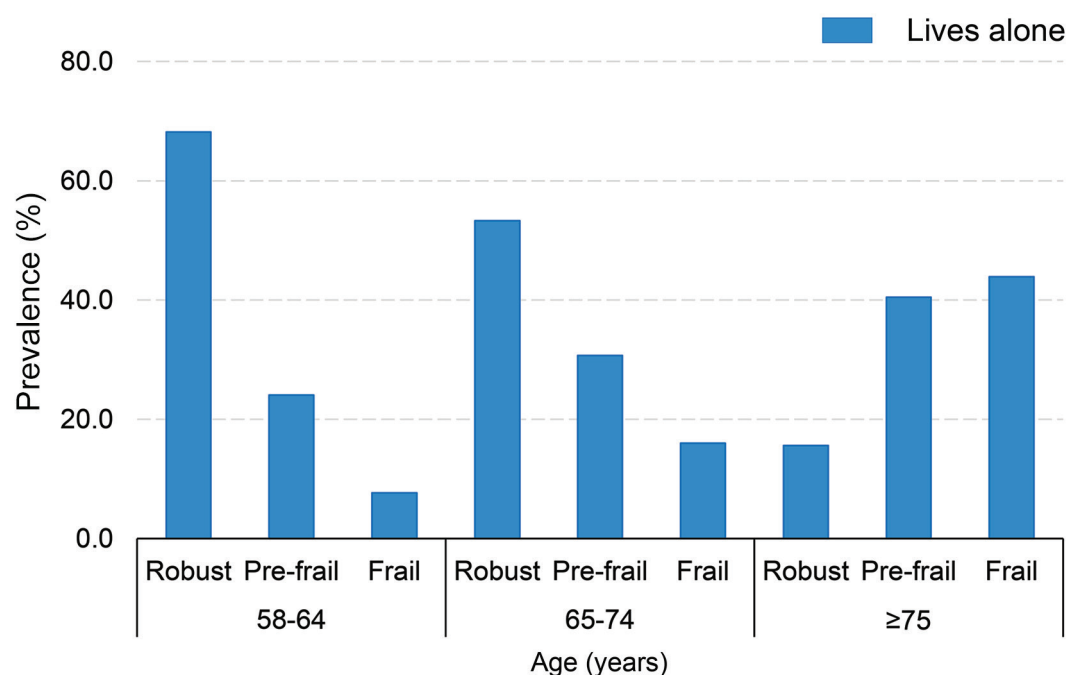
Age	58-64 years			65-74 years			75+ years		
	Robust	Pre-frail	Frail	Robust	Pre-frail	Frail	Robust	Pre-frail	Frail
Primary (%)	45	40	15	37	40	23	17	44	39
Secondary (%)	66	26	8	50	40	10	22	47	31
Third Level (%)	68	27	5	58	35	7	31	43	26

3.4 Living alone with frailty

The prevalence of living alone among adults aged 58 years and over is 10%, and the prevalence of frailty among those who live alone is 23.2% overall. The prevalence of frailty among adults who live alone by age group is summarised in Figure 3.3.

The prevalence of frailty among adults who live alone increases with advancing age, from 8% to 16% to 44% among the 58-64, 65-74 and 75 years and over age groups respectively. The prevalence of pre-frailty also increased with advancing age, with 41% of adults aged 75 years and over who live alone also categorised as pre-frail. With almost half of older adults aged 75 years and over who live alone also living with frailty, this subgroup of the older population should be marked for urgent clinical review during the COVID pandemic to ensure that they have the necessary community supports during periods of more severe COVID restrictions. This may be done through Public Health Nurse review of a register of older adults aged 75 years and over living alone in their locality, given the high prevalence of frailty in this group.

Figure 3.3. Living alone and frailty at Wave 5 using the FI measure



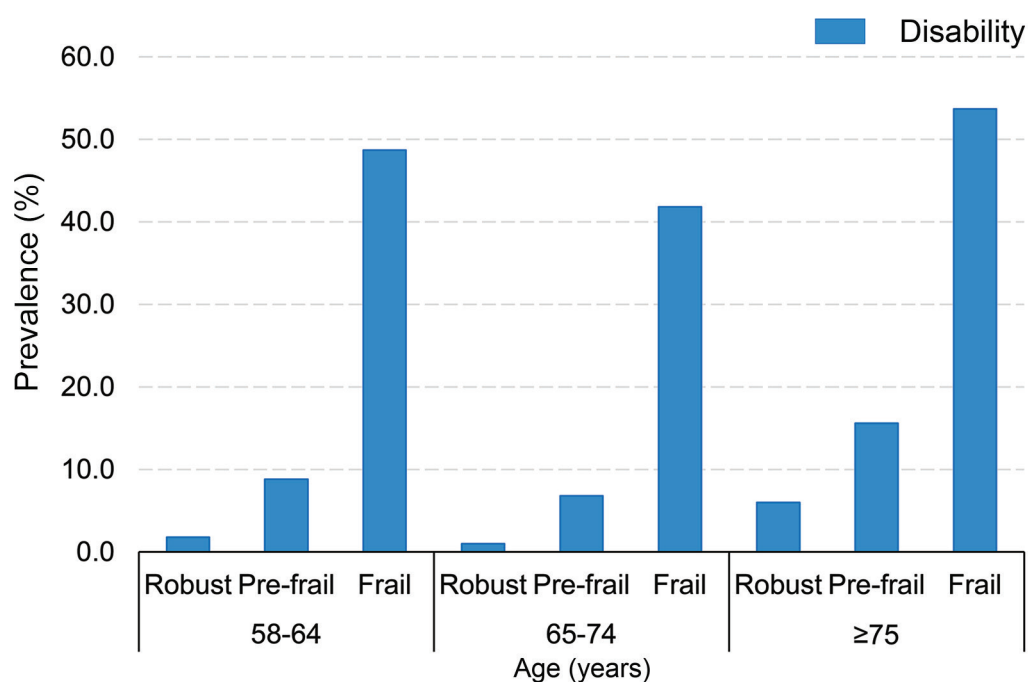
3.5 Frailty and disability

Frailty is a known risk factor for disability. Self-reported information on whether TILDA participants have any disabilities or difficulties in performing the basic and/or instrumental activities of daily living is provided during the home interview at Wave 5.

Participants are asked if they have any difficulties with activities of daily living (ADLs) or instrumental activities of daily living (IADLs), excluding any difficulties expected to last for fewer than three months. ADLs include tasks such as getting out of bed, bathing, dressing, eating, using the toilet and walking across a room, while IADLs include tasks such as preparing meals, doing household chores, shopping for groceries, managing medications, managing money and making telephone calls, all tasks which help support an independent lifestyle. We also asked if they received any help with these limitations, and who provided that help. The prevalence of disability is measured by the presence of at least one ADL or IADL at Wave 5 is summarised in Figure 3.4. The presence of at least one ADL or IADL disability is significantly higher among adults living with frailty compared to their counterparts living with pre-frailty or in robust health, at 48%, 42% and 54% in the 58-64, 65-74 and 75 years and over age groups respectively. This corresponds to exactly half (50%) of adults aged 58 years and over living with frailty also having a disability. Given the high prevalence of disability among adults aged 58 years and over living with frailty,

this sub-group of the older population (similar to those living alone with frailty) should be marked for urgent clinical review during the COVID pandemic to ensure that they have the necessary community supports during periods of more severe COVID restrictions. They also represent a high-risk group in considering measures to prevent SARS-CoV-2 infection and related adverse outcomes.

Figure 3.4. Disability and frailty by age at Wave 5 using the FI measure



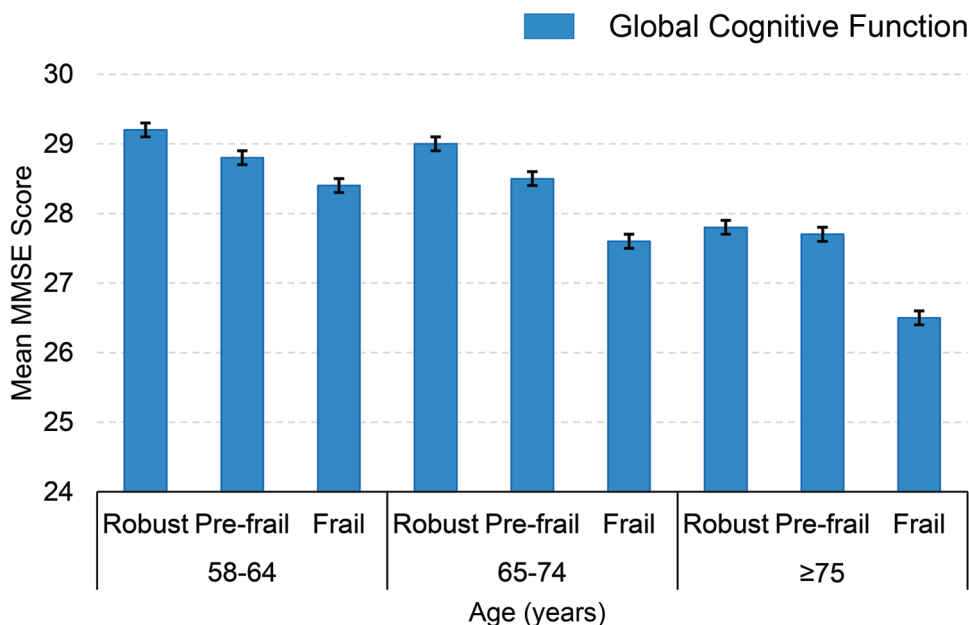
3.6 Frailty and cognitive Health

Frailty has a bi-directional relationship with cognitive health in older adults; thus, frailty may be both a risk factor for and a consequence of decline in cognitive function. Self-reported information regarding global cognitive function is gathered from participants during the home interview at Wave 5.

The Mini-Mental State Examination (MMSE) is a 20-item test that is used to screen for cognitive impairment; a maximum score is 30 on this test, with a cut-off of ≤ 24 indicating cognitive impairment (23, 25). It is commonly used in clinical practice to screen for dementia. It is also used to estimate the severity of cognitive impairment at a given point in time, and to follow the course of cognitive changes in an individual over time. It assesses orientation, recall, attention, calculation, language abilities and visuospatial ability.

The global cognitive function (MMSE) score by age group and frailty status is summarised in Figure 3.5. The average score on the MMSE is 29.0, 28.6 and 27.3 for the 58-64, 65-74 and 75 years and over age groups, respectively, demonstrating a gradual decline in global cognitive function with age. Individuals living with frailty exhibit the lowest scores on the MMSE, followed by those living with pre-frailty, while robust individuals have the highest MMSE scores indicating better cognitive function in each age group. On average, across the three age groups, adults with frailty and pre-frailty score 0.8-1.4 and 0.1-0.5 points lower on the MMSE respectively compared to robust older adults. This indicates a progressive decline in global cognitive function among those living with pre-frailty and frailty independent of age group. The decline in global cognitive function with age and among older adults living with frailty is important in the context of the COVID-19 pandemic. The co-occurrence of frailty and cognitive decline puts individuals with both conditions at increased risk of infection-related delirium and poor health outcomes if SARS-CoV-2 is contracted.

Figure 3.5. Global cognitive function (MMSE score, range 0-30) by frailty and age at Wave 5 using the FI measure



3.7 Informal care and formal community supports for frailty

The prevalence of people aged 58 years and over living with frailty and in receipt of informal care and formal private and public community support services by frailty status are reported in Figure 3.6 and Table 3.3. Informal care is measured by asking participants

if they received any help with ADLs or IADLs and who provided that help e.g. help with ADL and IADL limitations from a spouse/partner, child, relative or other. Participants are also asked if they are in receipt of formal public community support services e.g. home help, personal care attendant, meals-on-wheels and home care packages. Participants are also asked if they pay for private formal care services, namely a personal care attendant or home help.

Of the adults aged 58 years and over living with frailty, 57% do not receive any informal care or formal community support service, 31% receive informal care from a family member or friend, 26% receive formal private or public community support services and 16% receive both informal care and formal community support services. Of those who receive formal community support services, 11% receive public home help, 7% receive a public personal care attendant, 3% receive public meals-on-wheels and 3% are in receipt of a home care package. Among those aged 58 years and over, 9% pay for private home help or a personal care attendant service. As may be expected, the number of TILDA participants living with frailty who are in receipt of the different informal and formal private and public community support services increases with age (Table 3.3). This reflects the age-related increase in the prevalence of frailty.

The TILDA sampling frame does not include people with dementia at baseline or people living in nursing homes, and as such these data may underestimate numbers in receipt of both informal care and formal community support services for the total population aged 58 years and over in Ireland. In April 2020, TILDA published a short report using data obtained from a small non-representative sample (n=100) of interviews with participants who had transitioned from the community into residential nursing home care during the study. This report showed that the vast majority lived with advanced levels of physical and cognitive morbidity and disability. (26)

As may be expected, informal care and formal community supports are more commonly received and increase with age among older adults with frailty. However, it is significant that among the older group aged 75 years living with frailty, almost half (47%) do not receive any informal care or formal community supports. This subgroup of the older population are not only at increased risk of adverse health outcomes related to COVID-19, but they are also at increased risk of adverse health outcomes related to periods of more severe COVID restrictions. This group should be prioritised for urgent clinical review during the COVID pandemic to ensure that they have the necessary community supports to maintain levels of health and function.

Figure 3.6. Percentage of people aged 58 years and over living with FI frailty and in receipt of informal and formal community support services at Wave 5

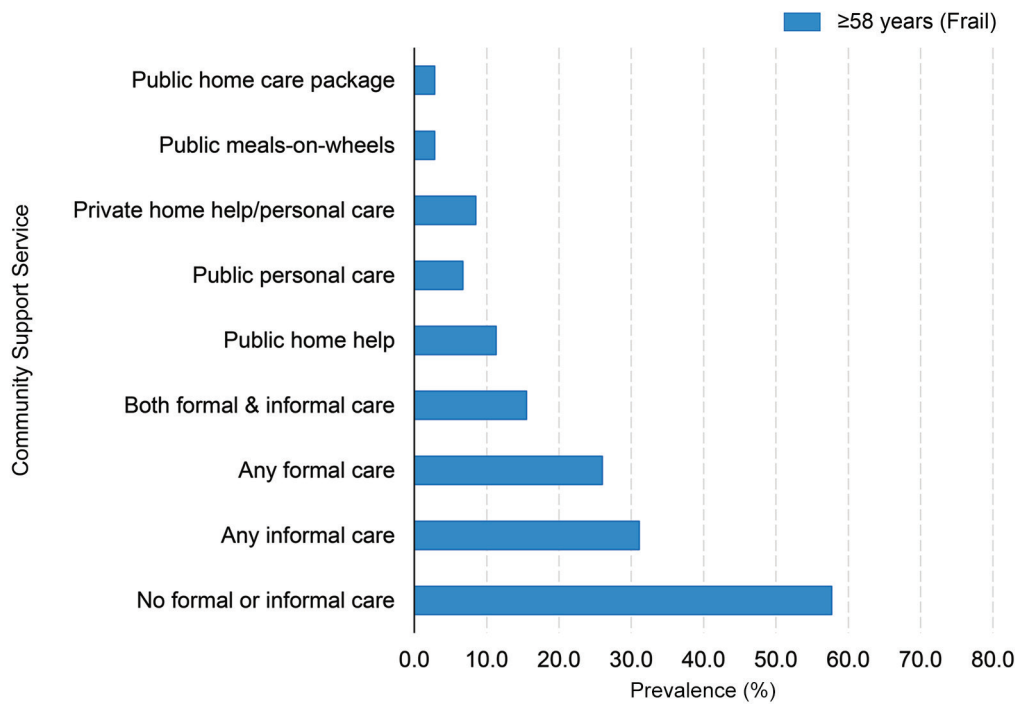


Table 3.3. Percentage of people aged 58 years and over living with frailty and in receipt of informal and formal community support services

	≥58 years*	58-64 years	65-74 years	≥75 years
	Frail	Frail	Frail	Frail
No formal or informal care (%)	58	71	73	47
Any informal care (%)	31	28	23	36
Any formal care (%)	26	3	13	38
Both informal and formal care (%)	16	3	9	22
Public home help (%)	11	<1	4	17
Public personal care attendant (%)	7	<1	3	10
Private home help/personal care (%)	9	3	5	12
Public meals-on-wheels	2.8	<1.0	2.8	3.8
Public home care package	2.8	<1.0	1.9	3.9

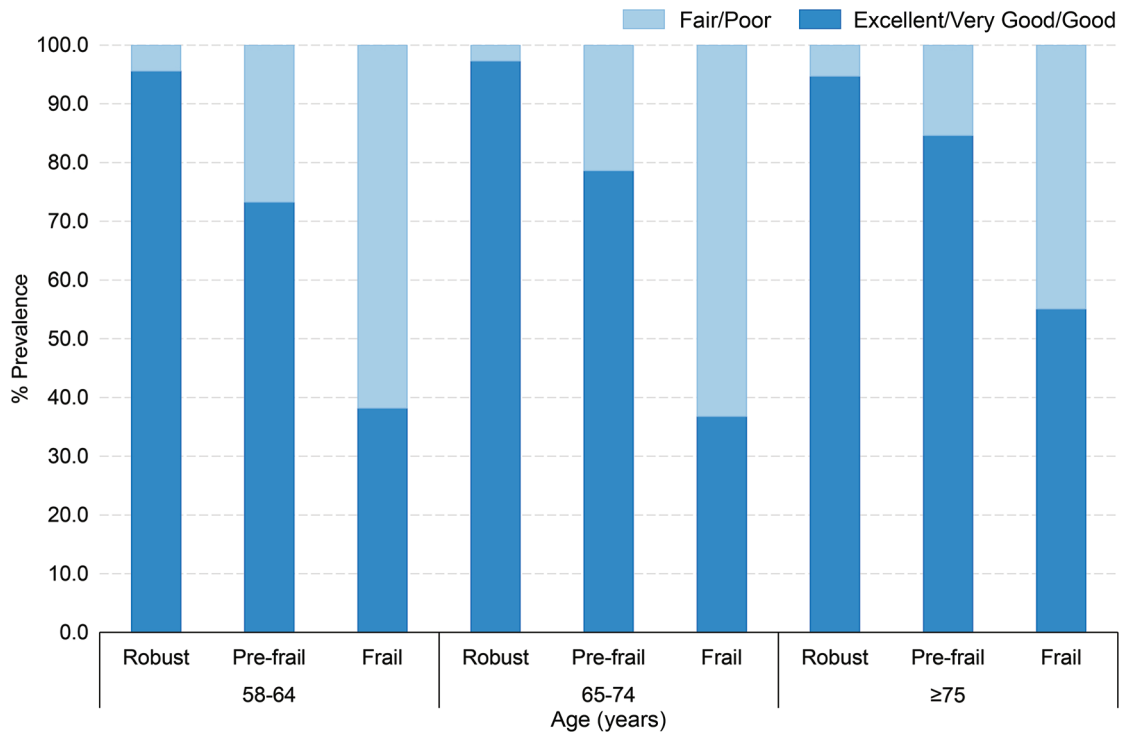
*The TILDA sampling frame does not include people with dementia or people living in nursing homes at baseline, and as such these data may underestimate numbers in receipt of both informal care and formal community support services for the total population aged 58 years and over in Ireland.

3.8 Frailty and self-rated health

The public's perceptions of frailty are generally negative and many older people with multimorbidity and disability do not identify themselves as frail (10). Despite the presence of frailty and pre-frailty, it is important to consider how TILDA participants perceive their own health status. To capture this, participants are asked to self-rate their physical health. Participants provide one of five response options which are: Excellent, very good, good, fair or poor.

Among participants aged 58 years and over living with frailty, 48% self-rated their physical health as excellent, very good or good, compared to 80% who are living with pre-frailty and 83% who are classified as robust using the FI measure. Among those living with frailty in the 58-64, 65-74 and 75 years and over age groups, 38%, 37% and 55% respectively, self-rate that their physical health is excellent, very good or good. Conversely, 62%, 63% and 45% of participants living with frailty self-rate their physical health as either fair or poor in the respective age groups. These data support the finding that the public's perceptions of frailty are generally negative and many older people with multimorbidity and disability do not identify themselves as frail. Here we show that over half of adults aged 75 years and over, who are classified as living with frailty using the FI measure, self-rate their health as excellent, very good or good. This is significantly higher than in the younger 58-74 age group, with just over a third of adults living with frailty self-rating their health as excellent, very good or good. This may reflect a more optimistic outlook or a different expectation of what good health means to people at older ages.

Figure 3.7. Self-rated health and frailty by age at Wave 5 using the FI measure



3.9 Conclusion

This report demonstrates that FI frailty is present in almost one in six adults aged 58 years and over living in the community in Ireland. It is striking that one in three adults aged 75 years and over are living with frailty as assessed by the FI. The Irish Government and HSE consider the over-70s age group as ‘very high risk/extremely medically vulnerable’ to the adverse health impacts of contracting COVID-19. The HSE continues to advise this group to ‘cocoon’ during the COVID-19 public health pandemic. (27) For those over 70 years and living with frailty, the risks of contracting the infection and subsequent admission to hospital, critical/intensive care and risk of death are even greater. (9,13) The data presented in this report also highlight the prevalence of factors associated with at-risk groups, including adults living alone with frailty, adults living with frailty and a disability and adults living with frailty and cognitive decline. This chapter also suggests that there is significant need to prioritise clinical review for informal and formal care supports in the community among older people living with frailty.

The impacts of frailty on the Irish health and social care system is considerable (8) and are greatly exacerbated by the impact of the COVID-19 pandemic. The significance of frailty as an impediment to healthy ageing was highlighted at a focus meeting on ‘Frailty and Intrinsic Capacity’ by the World Health Organisation (WHO) Clinical Consortium on Healthy Ageing in December 2016. (28) The significance of frailty to healthy ageing and healthcare planning and delivery in Ireland is recognised by the National Clinical Care Programme for Older People (NCPOP) and the Integrated Care Programme for Older People (ICPOP). A National Frailty Education Programme, in partnership with TILDA, was initiated in 2017 to train health professionals to understand the risk factors for frailty, enabling them to implement programmes for early detection, prevention and management. (29,30) TILDA is actively engaged in the new Irish Frailty Network for Education, Quality Improvement and Research hosted by the Irish Gerontological Society (<https://www.irishgerontology.com/news/blogs/time-right-irish-frailty-network-education-improvement-and-research>). TILDA also actively participates in the first-ever postgraduate training module on the Assessment and Management of Frailty in Ageing Adults delivered for the first time by an Irish Medical School (<https://www.tcd.ie/medicine/medical-gerontology/postgraduate/standalone-frailty-module/>). In 2016, the WHO Clinical Consortium on Healthy Ageing stated that active case findings of older people with frailty are essential for the reorientation of health services to meet people’s needs; proactive identification of people in the community at risk of frailty provides opportunities to intervene and so prevent or delay functional decline and disability. (28)

In the context of COVID-19, the proactive identification of people with frailty in the acute setting will also be imperative when decisions must be made regarding to transfer to resource-limited critical care pathways. (5) Indeed, it appears frail older people may often present differently with symptoms of COVID-19. A recent study demonstrated a higher prevalence of probable delirium as a COVID-19 symptom in older adults with frailty compared to other older adults. The authors emphasised the need for systematic frailty assessment and screening for delirium in acutely ill older patients in hospital and community settings. They suggested that clinicians should suspect COVID-19 in frail adults with delirium. (31)

Frailty is not an inevitable consequence of ageing: two in three people aged 75 years and over and one in two people aged 85 years and over are classified as robust or pre-frail. Frailty is a dynamic process, and people can experience positive transitions, reverting to pre-frailty from frailty and to robustness from pre-frailty. (11) The development of frailty is modifiable; it may be delayed, halted and even reversed with timely and appropriate prevention, detection and intervention strategies. ‘Cocooning’, though difficult and not without its own adverse impacts on social, mental and physical health, is still advised as a strategy to protect very high-risk adults aged 70 years and over in Ireland, particularly those living alone with frailty or those living with both frailty and disability who are at high risk of mortality due to COVID-19 infection. Older people, whether or not they fall into the higher-risk categories for COVID-19 infection, are the fabric of our society. (32) We must support and protect the mental, physical and social health of this group by facilitating more informal and formal community supports, while also proactively increasing healthcare service planning and delivery during this protracted COVID-19 pandemic.

Despite frailty being identifiable in many older adults, they often rate their health favourably, not self-identifying as being frail or in poor health, particularly at older ages of 75 years and over. This underscores the need for greater awareness and education around proactively identifying drivers of frailty in the community as well as the acute setting and providing pathways to timely assessment and intervention through CGA. From a public health perspective, we must engage the wider population to increase preventative individual- and population-based strategies to delay or impede frailty. This may involve a change in emphasis from the negative connotations of frailty to the more positive language of intrinsic capacity, as suggested by the WHO. Whatever language we use or assessment tools we employ, it is important to reiterate and recognise that the presence of frailty is not a clinical diagnosis and does not define a group or the individual. The development of frailty is dynamic, modifiable and not an inevitable consequence of ageing.

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Appendix 3A. Tables on Living with Frailty in Ireland 2018

Table 3.A1. Components of 31-item FI based on TILDA CAPI variables from Wave 5

TILDA CAPI Variables	Cut-points
Difficulty walking 100m	Yes = 1; No = 0
Difficulty rising from a chair	Yes = 1; No = 0
Difficulty climbing stairs	Yes = 1; No = 0
Difficulty stooping, kneeling or crouching	Yes = 1; No = 0
Difficulty reaching above shoulder height	Yes = 1; No = 0
Difficulty pushing/pulling large objects	Yes = 1; No = 0
Difficulty lifting/carrying weights ≥10lb	Yes = 1; No = 0
Difficulty picking up a coin from a table	Yes = 1; No = 0
Feeling lonely	Rarely or none of the time=0; Some or a little of the time=0.33; Occasionally or a moderate amount of time=0.66; All of the time=1
Poor self-rated physical health	Excellent=0; Very good=0.25; Good=0.5; Fair=0.75; Poor=1
Poor self-rated vision	Excellent=0; Very good=0.25; Good=0.5; Fair=0.75; Poor=1
Poor self-rated hearing	Excellent=0; Very good=0.25; Good=0.5; Fair=0.75; Poor=1
Poor self-rated memory	Excellent=0; Very good=0.25; Good=0.5; Fair=0.75; Poor=1
Difficulty following a conversation	None=0; Some=0.5; Much/Impossible=1
Daytime sleepiness	Would never doze=0; Slight chance of dozing=0.33; Moderate chance of dozing=0.66; High chance of dozing=1
Polypharmacy	Yes = 1; No = 0
Knee pain	Yes = 1; No = 0
Hypertension	Yes = 1; No = 0
Angina	Yes = 1; No = 0
Heart attack	Yes = 1; No = 0
Diabetes	Yes = 1; No = 0
Stroke and transient ischaemic attack	Yes = 1; No = 0
High cholesterol	Yes = 1; No = 0
Irregular heart rhythm	Yes = 1; No = 0
Other CVD	Yes = 1; No = 0
Cataracts	Yes = 1; No = 0
Glaucoma and age-related macular degeneration	Yes = 1; No = 0
Arthritis	Yes = 1; No = 0
Osteoporosis	Yes = 1; No = 0
Cancer	Yes = 1; No = 0
Varicose ulcer	Yes = 1; No = 0
<i>Incontinence*</i>	Yes = 1; No = 0

Adapted from Roe et al, 2017 (23)

*Not included in FI at Wave 5.