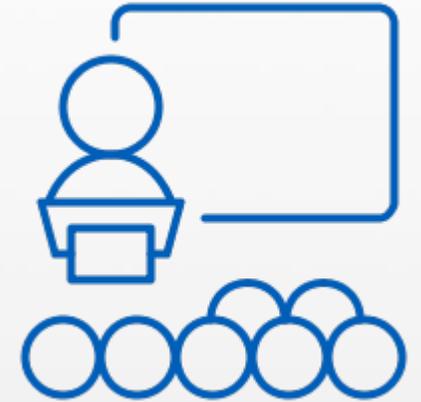


FRAILTY, COVID-19 AND HEALTHY AGEING



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Agenda

- National picture of ageing
- How does an ageing population affect us as a Trust
- What do we mean by “frailty”
- Covid-19 and frailty
- Quality Improvement
- Healthy ageing



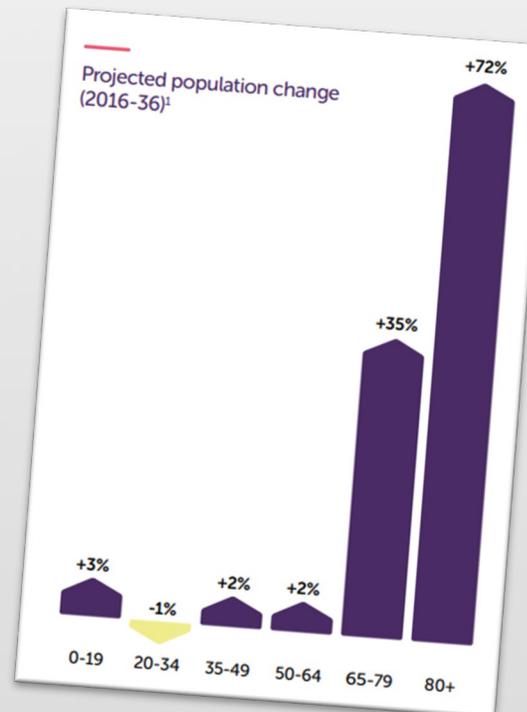
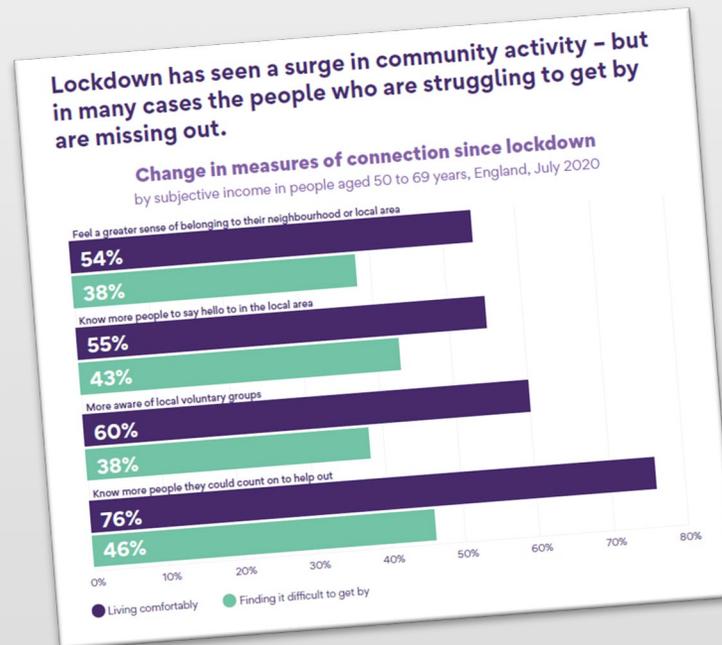
Please note any photos in presentation without masks were taken prior to March 2020





National picture of ageing

- Even before the pandemic, progress on improving life expectancy was stalling and disability free life expectancy was going backwards
 - A girl born today can expect to live to just **62** without a disability or health condition
- Women in the wealthiest parts of the country are set to live **16 years longer** in good health than those in the poorest



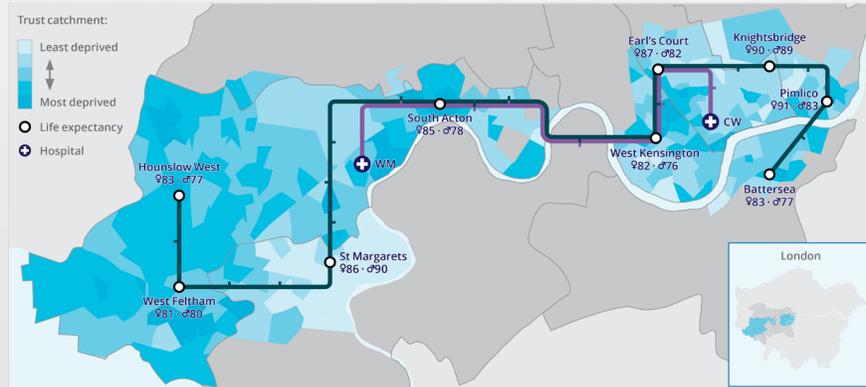
A picture of health

Summary profile of our Trust's local population

Our first-ever health profile describes the location, demographic characteristics and key health needs of our local community, whether or not they use our hospital services.

Life expectancy and deprivation

Life expectancy describes the number of years someone can expect to live, and deprivation describes the social and economic status of an area. These two indicators are often linked—life expectancy tends to be lower in more deprived areas. Areas with higher levels of deprivation also experience poorer health outcomes. Travelling across our local community reveals significant differences in levels of both deprivation and life expectancy.



Deprivation across our local community varies significantly—areas of higher (darker) and lower (lighter) deprivation are dispersed throughout, with **3 in 50** people living in one of the 20% most deprived areas in England. Women living in parts of West Feltham die **10 years earlier** than women living in parts of Pimlico. Men living in parts of West Kensington live **14 fewer years** than men living in parts of St Margarets. Healthy life expectancy is the number of years someone can expect to live in good health. In the most deprived areas, women live **21 fewer years** and men live **22 fewer years** in good health than those in the most affluent areas.

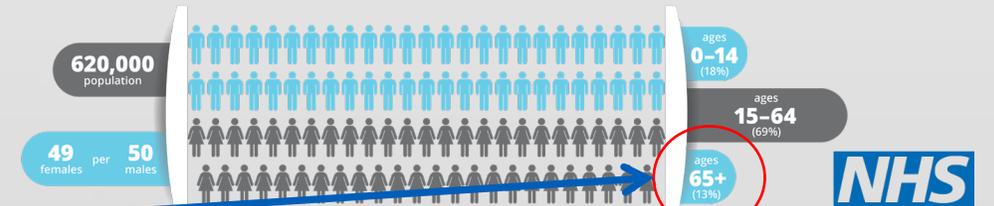
Our core catchment area

Our catchment area is the geographical footprint in which the Trust acts as a major provider of hospital services for the local community. This area spans parts of seven local authorities.



Our local population

620,000 people—that's **1 in 14** London residents—live within our catchment area. Residents of Hounslow make up 42% of our catchment population, compared to 1% of Ealing residents. **1 in 6** people living within the catchment are from the South West London region.



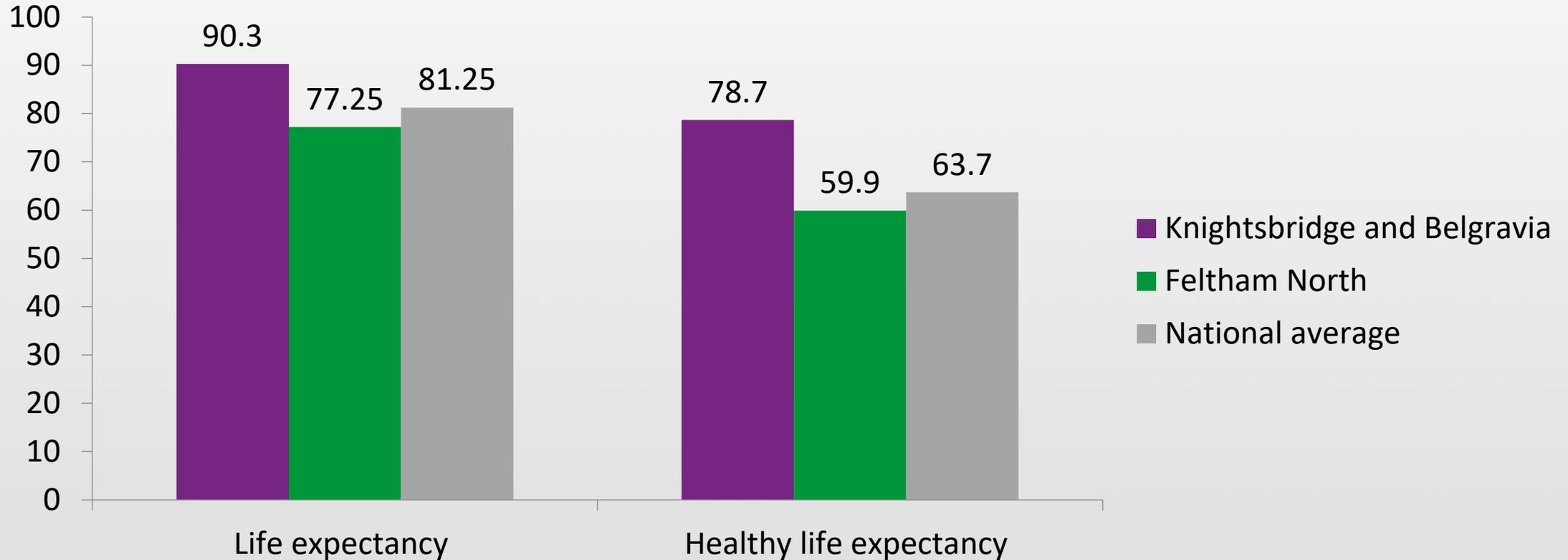
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- 13% of our local population are over 65 years (this equates to around 80,000 people)
- 66% of hospital admissions are over 65 years



Life expectancy and healthy life expectancy





Frailty

Jeremy Corbyn, 70, is 'too frail' to be PM and may be forced to stand down as Labour leader because he is not 'physically or mentally' up to the job, senior civil servants fear

Coronavirus: Delirium 'key symptom' in frail older people

By Philippa Roxby
Health reporter

30 September

Coronavirus pandemic



One million older Britons are at risk of starving to death: An epidemic of malnutrition is blighting the elderly and official healthy eating advice is partly to blame...

- The results of malnutrition include bone-wasting diseases such as osteoporosis
- Cost of treating under-nourished patients estimated at roughly £20 billion a year
- 'Healthy eater' Christina Rochdale followed a low-fat diet with bad ramifications
- Gerry Collins, 69, from South London, also suffered negative effects due to diet

Elderly people should try weightlifting and protein powders to fight frailty, study suggests

- Study finds muscle training and protein powders are the best way to combat frailty
- Lifting weights is also healthier for the heart, according to separate research
- One in 10 pensioners suffer from infirmity due to increases in life expectancy



Severely frail individuals with COVID-19 are three times more likely to die, study finds

Posted on 05 Feb 2021

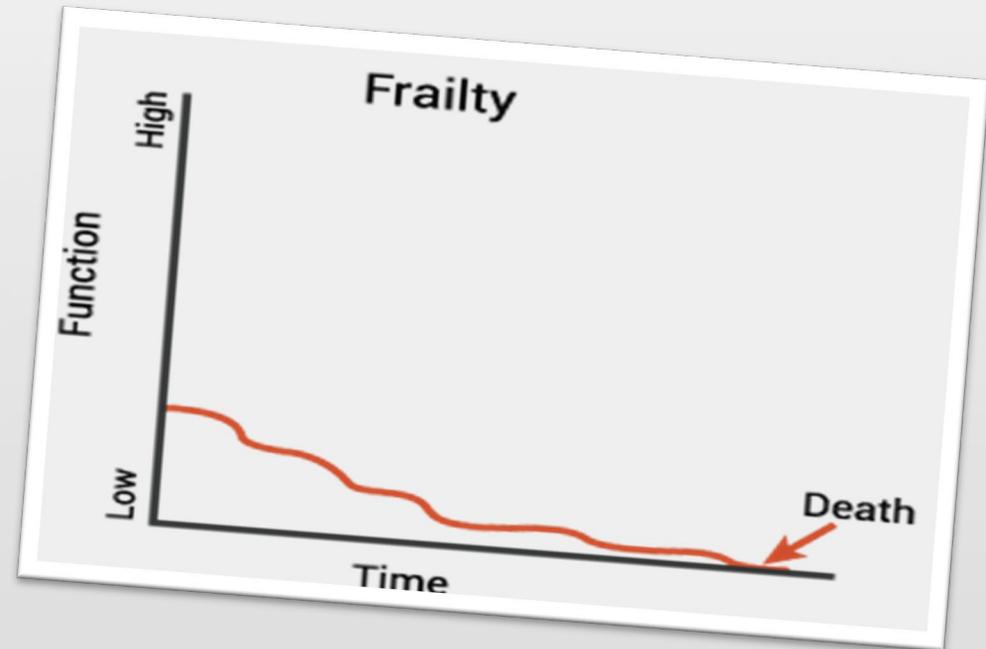
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What is Frailty?

- A multi-system reduction in reserve capacity. This results in an increased risk of negative health outcomes from minor external stressors.
- Frailty can be characterised by the presence of multiple “factors” such as falls, poor mobility, poor nutrition, incontinence, dementia or delirium.





Frailty vs Ageing



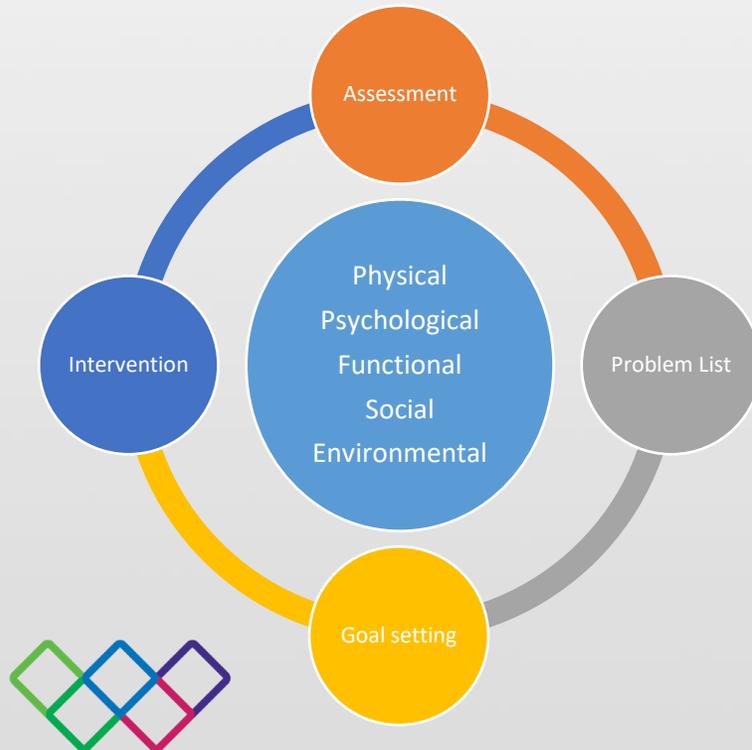
- Ageing is not a disease but a **developmental process**.
 - It is universal, it is an internal process and it is progressive
- The longer a person lives, the more damage occurs to their DNA and to the materials outside of their cells, this prevents organs from responding as robustly as they used to.
- Frailty is “age associated”. This means that being older makes you more at risk from having frailty, but it is not a guarantee as you get older.
- Frailty can be clinically recognised as a **diagnosis** and unlike ageing can be slowed and reversed with the right management.





Frailty management

- The gold standard management for a patient with frailty is the **comprehensive geriatric assessment (CGA)**.
- This is a multi dimensional assessment of a patient's needs and concerns which results in a goal orientated intervention from healthcare professionals.



F	• Falls • Fractures
R	• Reducing mobility • Reducing ability to do ADLs
A	• Appetite (and hydration)
I	• Incontinence and constipation
L	• Lots of medications / Lots of medical conditions
D(TY)	• Delirium • Dementia



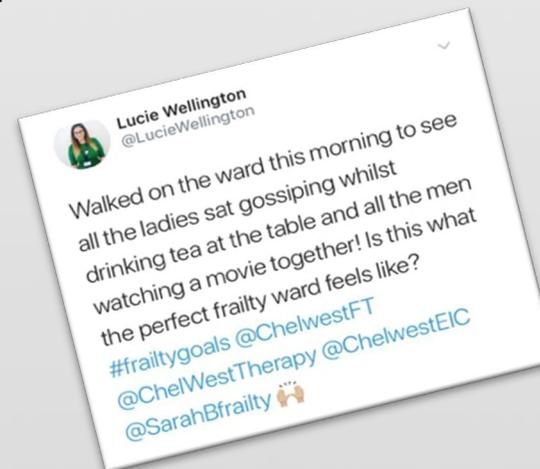


Quality Improvement (QI)

- As part of our Quality Strategy 2019–24, the Trust is supporting all staff to be involved in developing ideas for improvement, designing positive changes and making improvements on the ground in the areas they know best.
- Due to rising numbers of admissions at the Trust from patients over 65, there has been a drive to improve in-hospital frailty care, aiming at maximising function of patients and achieving reduced length of stay
- In 2019, I co-lead a QI project whereby a frailty unit was introduced to provide specialist frailty care from frailty trained nurses, therapists and geriatricians
- The unit had support from CW+ with increased equipment provision and also had a high presence of volunteers to support with keeping patients active



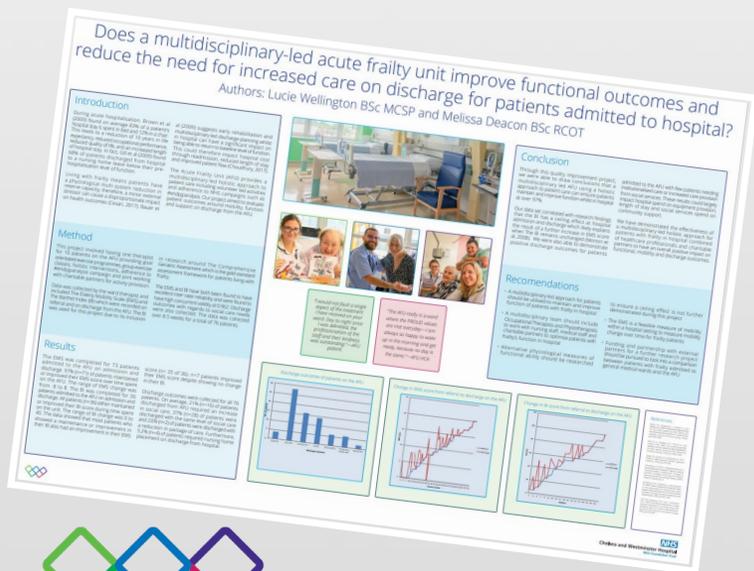
“The AFU really is a ward where the PROUD values are met every day—I am always so happy to wake up in the morning and get ready, because no day is the same.”





QI project results

- We were able to successfully demonstrate that a multidisciplinary-led acute frailty unit can improve functional outcomes and reduce the need for care on discharge for patients admitted to hospital.
- 97% of patients maintained or improved their mobility during their admission
- In comparison to a standard medical ward, our patients had higher function on leaving hospital than patients on a standard medical ward.
- Moving forwards, this model of care could be replicated across our medical wards in order to reduce length of stay and support our NWL partners in reducing the need for patients having support at home.



“I would not fault a single aspect of the treatment I have received on your ward. Day to night since I was admitted, the professionalism of the staff and their kindness was outstanding”



We were proud to win the Governor's award for quality improvement at the 2019 staff awards and also receive an award at the Trust's Research, Innovation and Quality Improvement Event, 2019.





What has changed since then?



- Since the successful results of the QI project, the pandemic has meant members of the population already identified as clinically frail are likely to have seen further progression of their frailty during the pandemic.
- Due to restrictions and social distancing measures, this group are more susceptible to social isolation, depression, malnutrition, reduced access to care, decreased physical activity and increased sedentary time
- The above can all impact on the progression of frailty. As a result, even those who have not had COVID-19 are at risk of further frailty.
- There is also a lot of evidence to suggest that patients living with frailty will have poorer outcomes if admitted to hospital.





COVID-19 and frailty

Table 2. Number of deaths and mortality rate (per 100,000 population) in laboratory-confirmed cases of COVID-19, by age group†**

Age group	Deaths (week 27 onwards*)	Mortality rate** (95% CI) (week 27 onwards*)	Deaths (January 2021)	Mortality rate** (95% CI) (January 2021)
<5	<10	0.3 (0.1-0.6)	<10	0.7 (0.1-2.6)
5-9	<10	0.1 (0.0-0.4)	<10	0.3 (0.0-1.9)
10-19	18	0.5 (0.3-0.7)	<10	0.9 (0.3-2.1)
20-29	89	2.1 (1.7-2.5)	39	6.3 (4.5-8.6)
30-39	331	7.4 (6.6-8.3)	185	28.9 (24.9-33.4)
40-49	962	22.8 (21.4-24.3)	507	83.7 (76.6-91.3)
50-59	2,955	65.9 (63.5-68.3)	1,574	244.6 (232.6-256.9)
60-69	6,746	192.9 (188.4-197.6)	3,354	668.4 (645.9-691.4)
70-79	15,473	553.9 (545.3-562.7)	7,231	1,803.8 (1,762.5-1,845.5)
80+	39,897	2,376.4 (2,353.2-2,399.9)	18,931	7,856.9 (7,745.4-7,969.6)

*Data is presented from 29 June 2020 to 31 January 2021.

Source: Public Health England, American Geriatrics Society



COVID-19 IS NOT OVER AND AGE IS NOT ENOUGH: USING FRAILTY FOR PROGNOSTICATION IN HOSPITALIZED PATIENTS

JOURNAL OF THE AMERICAN GERIATRICS SOCIETY

CFS 1-3

Very fit to managing well



CFS 4

Vulnerable



CFS 5

Mildly frail



CFS 6

Moderately frail



CFS 7-9

Severely frail to terminally ill

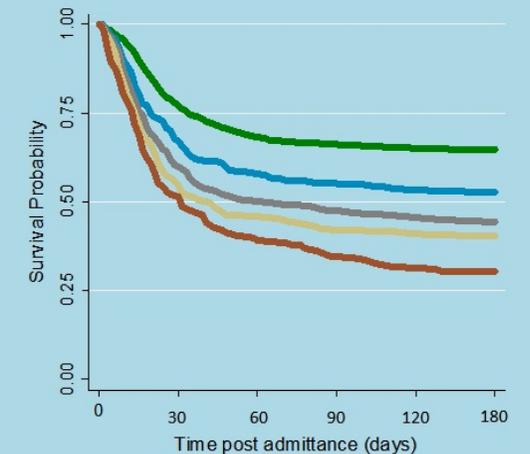


CO-FRAIL STUDY



FRAILTY

PLEASE HANDLE WITH CARE



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COVID-19 and frailty screening

- An assessment of frailty, including the use of the clinical frailty scale, has been used to inform treatment expectations and plans during the COVID-19 pandemic. This method developed by Kenneth Rockwood from Canada uses a “cumulative deficit” model.

“ the more things wrong with you the more likely you are to be frail”

Clinical Frailty Scale*

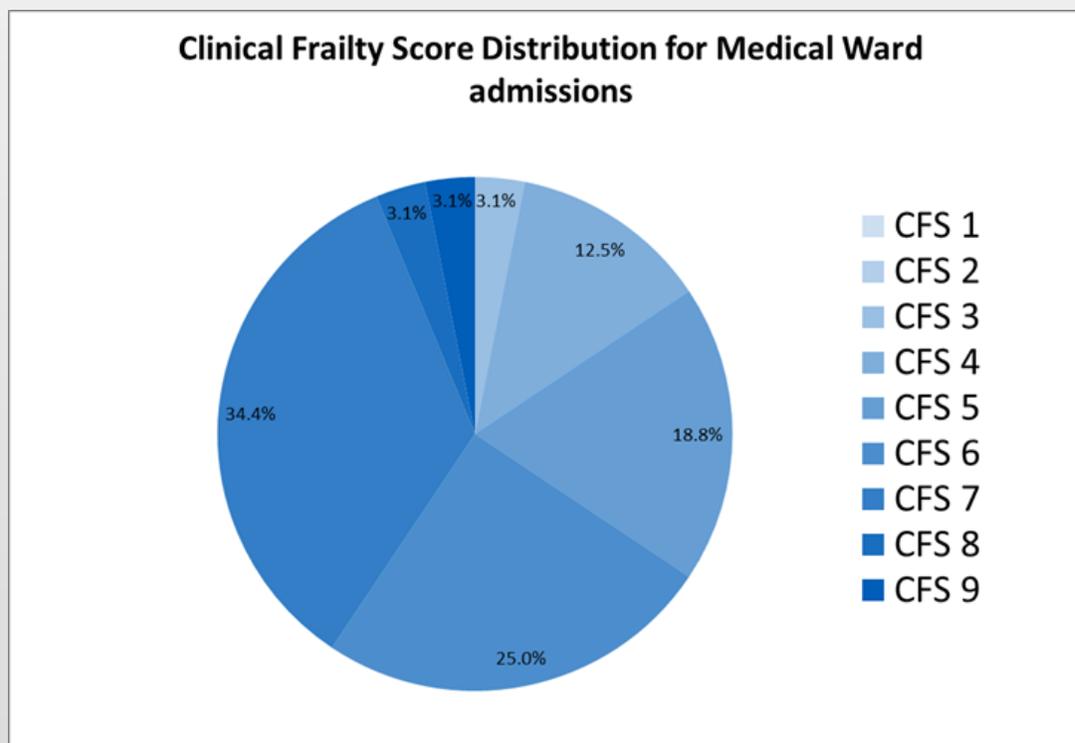
 <p>1 Very Fit – People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.</p>	 <p>7 Severely Frail – Completely dependent for personal care, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months).</p>	
 <p>2 Well – People who have no active disease symptoms but are less fit than category 1. Often, they exercise or are very active occasionally, e.g. seasonally.</p>	 <p>8 Very Severely Frail – Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.</p>	
 <p>3 Managing Well – People whose medical problems are well controlled, but are not regularly active beyond routine walking.</p>	 <p>9 Terminally Ill - Approaching the end of life. This category applies to people with a life expectancy <6 months, who are not otherwise evidently frail.</p>	
 <p>4 Vulnerable – While not dependent on others for daily help, often symptoms limit activities. A common complaint is being “slowed up”, and/or being tired during the day.</p>	<p>Scoring frailty in people with dementia</p> <p>The degree of frailty corresponds to the degree of dementia. Common symptoms in mild dementia include forgetting the details of a recent event, though still remembering the event itself, repeating the same question/story and social withdrawal.</p> <p>In moderate dementia, recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting.</p> <p>In severe dementia, they cannot do personal care without help.</p>	
 <p>5 Mildly Frail – These people often have more evident slowing, and need help in high order IADLs (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.</p>	<p>* 1. Canadian Study on Health & Aging, Revised 2008. 2. K. Rockwood et al. A global clinical measure of fitness and frailty in elderly people. CMAJ 2005;173:489-495.</p>	
 <p>6 Moderately Frail – People need help with all outside activities and with keeping house. Inside, they often have problems with stairs and need help with bathing and might need minimal assistance (cuing, standby) with dressing.</p>		





Trends within our Trust

- We collected frailty data from the general medical and elderly care wards in October and November 2020
- Over 80% of the patients recorded scored 5 or higher on admission to hospital, indicating some level of frailty. This was scored based on their level of function on first contact with therapy teams.





What can we all do?

- As a Trust we can try to promote, educate and advise our patients coming in to hospital
- Every contact is an opportunity to engage our patients and provide them with support on how to improve on certain aspects of health and wellbeing that we know have links with frailty





Socialisation

- Evidence increasingly suggests a link between social interaction and health, particularly with cognition
- Many older adults have lost this during lockdown due to isolation to protect other aspects of their health
- Equipping them with both the technology and education on its use for media such as video calls may be an effective way of helping to overcome this





Adequate nutrition



Vitamin D

Adequate nutrition

- Maintaining a healthy and substantial diet helps to prevent the risk of muscle loss and therefore loss of function
- Increased time spent indoors will reduce opportunities for Vitamin D – a key factor in bone health
- As a result, additional supplementation of Vitamin D in diet is important
- We need to not only provide advice, but ensure patients have adequate support if they are limited when it comes to purchasing and preparing food





Exercise

Physical activity

- Whilst exercise is important, reducing sedentary time and increasing physical activity has been more difficult for everyone during the pandemic
- For our therapy team, the challenge has been to think creatively and find ways to improve this whilst patients are still confined to their homes
- Home exercises programmes are very beneficial, however understanding the physical exertion of day to day tasks can be another way to increase activity



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Did you know?

The NHS has produced physical activity guidelines for older adults.

Adults aged 65 and over should:

- aim to be physically active every day. Any activity is better than none. The more you do the better, even if it's just [light activity](#)
- do activities that improve [strength, balance and flexibility](#) on at least 2 days a week
- do at least 150 minutes of [moderate intensity activity](#) a week or 75 minutes of [vigorous intensity activity](#) if you are already active, or a combination of both
- reduce time spent sitting or lying down and break up long periods of not moving with some activity





How can we achieve this?

Metabolic Equivalent of Task (METs)

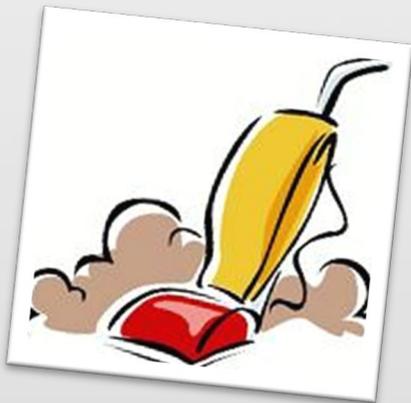
- Multiples of the basal metabolic rate
- 1.0 METs would be considered the standard resting metabolic rate, i.e. sitting quietly
- Every task can be allocated a METs measurement to give a basic idea of the energy exertion required
- This does not take into account an individual's specific metabolic rate





Metabolic equivalents for household tasks

- To achieve the NHS advice of at least 150 minutes of moderate intensity exercise per week, older adults should aim for 500-600 METs per week



10 mins = 50 METs



10 mins = 44 METs

TABLE 1 Metabolic equivalents of household chores

Activity	METS ^a	Watts ^b	Intensity					
			Light		Moderate		Heavy	
			METS	W	METS	W	METS	W
Gardening								
digging	4.4	77						
raking	3.5	61						
weeding	3.5	61						
Heavy housework								
carpentry	5-7	88-123						
grocery shopping	2-7	35-123						
painting	4-5	70-88						
remodelling	4-5	70-88						
repairing	4-5	70-88						
washing floor	3.3	58						
washing windows	4.9	86						
Light housework								
cooking	2.5	44						
dishes	2.1	37						
ironing	2.0	35						
making beds	3-5	53-88						
mowing lawn with power mower	3-5	53-88						
Mowing lawn (push mower)	5-7	88-123	3	53	4	70	5	88
Farm chores								
Snow shovelling	5.1	89	4	70	6	105	8	140
Wood cutting	5-7	88-123	4	70	5	88	7	123

^aIndicates energy expenditure as a multiple of resting metabolic rate.

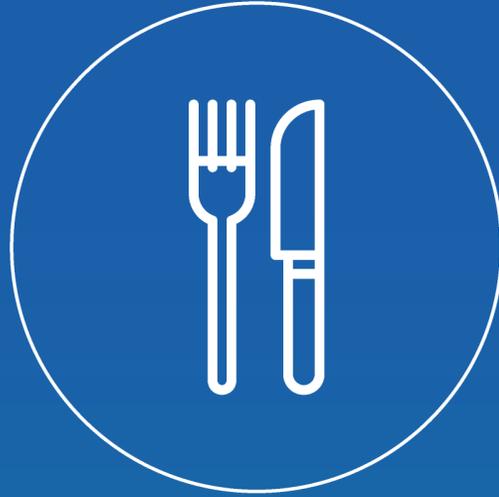
^bValue indicated is for a 70-kg individual.



Our final message...



Socialization



Adequate nutrition



Vitamin D



Exercise



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