The Malnutrition Pathway

A GUIDE TO MANAGING FRAILTY, SARCOPENIA & MALNUTRITION

Including Assessment and Actions to Improve Outcomes and Quality of Life

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- Frailty is a state of vulnerability characterised by a loss of reserve across multiple organ systems. In simple terms, someone who is frail is less able to "bounce back" after a stressor event, be that something minor like a urine infection or a more significant event like a fractured hip *(figure 1)*.
- The event can trigger major changes in health from which the patient may fail to return to their previous level of health[1].
- The decline in physiologic reserve and function across multi-organ systems contributes to adverse health outcomes[2].
- Frailty is frequently associated with ageing; however, it can also arise with many progressive long-term conditions and can occur in younger people who have illness or disease[3-5].
- It is often considered a progressive long-term condition, with episodic deteriorations

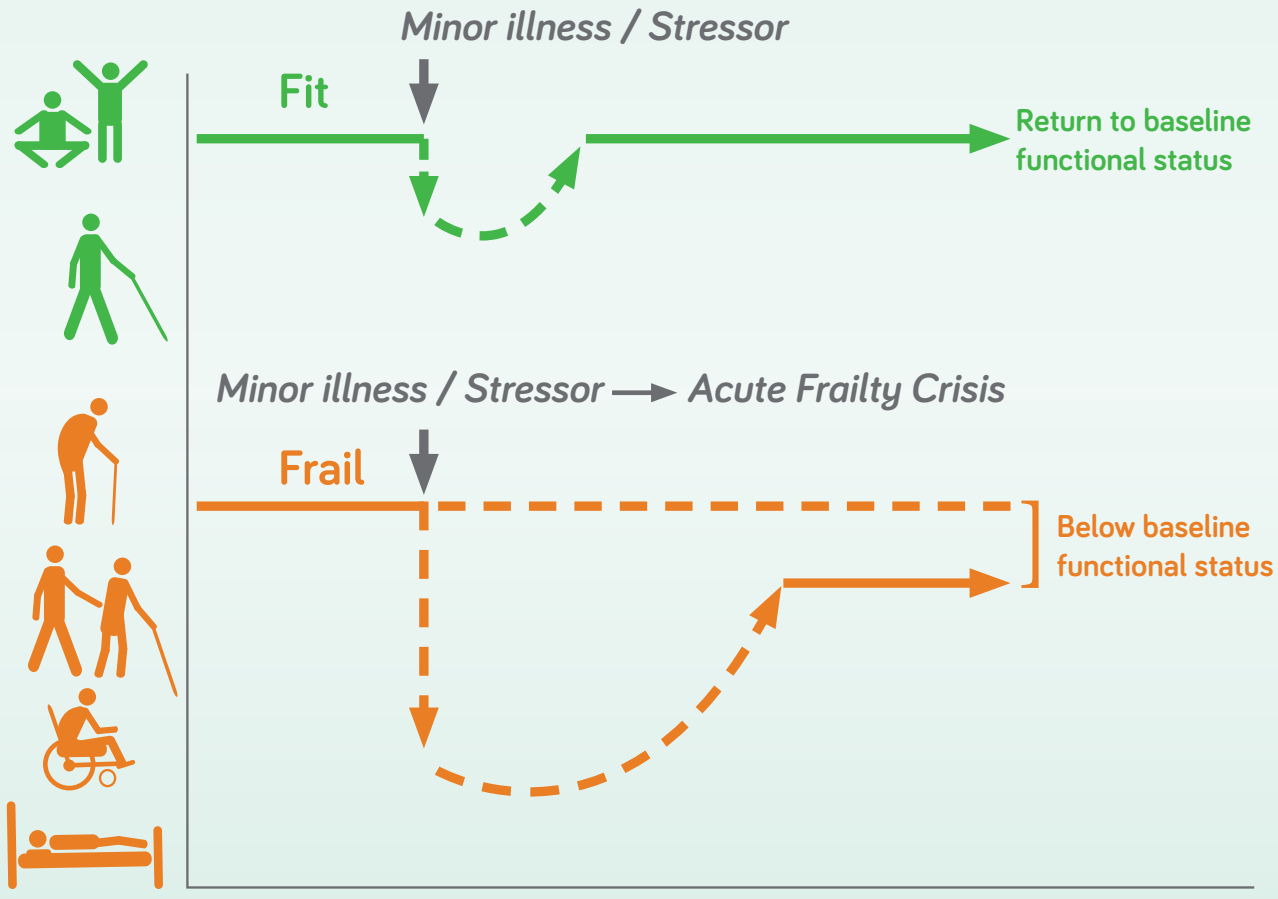


Figure 1: Conceptual Model of Frailty

COMMON FEATURES OF FRAILTY

People who are frail usually have three or more of five symptoms that often occur together. These include:

(i) Weight Loss - Unintentional weight loss (5 or more kilograms within the past year) or decreased appetite.

(ii) Fatigue - Feeling overtired, with low energy and a strong desire to sleep that interferes with normal daily activities.

(iii) Loss of Strength - Muscle loss and weakness, low grip strength measured with hand-grip dynamometer.

(iv) Slow Walking Speed - Walking at a slow space or measured slow gait, reduced arm swing bilaterally.

(v) Low Activity Level - Low frequency of moderate intensity activity.

Adapted from the Phenotypic Model[6]

FRAILTY – FACTS AND FIGURES

- An estimated 1.8 million people in the UK aged 60 and over are living with frailty[7]
- All older adults are at risk of developing frailty. There are currently 11 million people in the UK > 65 years of age[8]. 35% of people > 65 years are living with some degree of frailty[9], equivalent to nearly 4 million people
- Approximately 47% of hospital inpatients aged over 65 are affected by frailty[9]
- Risk levels are substantially higher among those with comorbidities, 69% of people > 85 years live with multiple conditions[9]
- Low socioeconomic status, poor diet, and sedentary lifestyles are also risk factors[10]

The prevalence of frailty is expected to rise as people live longer often with multiple long-term conditions[11]. In the absence of intervention, the increasing numbers of people affected by frailty will have a significant impact on health and care requirements and provision[9].

WHY IS IT IMPORTANT TO IDENTIFY FRAILTY?

Having frailty places a person at increased risk of a number of adverse outcomes, including reduced mobility, falls, fragility fractures due to a high prevalence of underlying osteoporosis, disability, acute confusion, incontinence, hospitalisation, and premature death[1,12].

People living with frailty are less able to respond to stress factors such as acute illness, injury or changes in their environment including personal or social circumstances. Even a seemingly minor health event, such as a simple virus for example, can result in adverse health outcomes and loss of independence[13]. As well as the cost to the individual's health and well-being, frailty costs the UK healthcare system around £5.8 billion a year[8]. Frailty is, however, amenable to interventions. Timely medical, nutritional and physical interventions that address the underlying causes can avoid unnecessary harm, improve outcomes and an individual's (and their families) lived experience[1]. Interventions rely on an understanding of several key components - sarcopenia (muscle strength) and nutrition are particularly relevant as they are modifiable factors.

KEY POINT

Encouraging people to stay well for as long as possible by keeping well nourished, active and managing long-term conditions, can reduce pressure on the wider health and care system, facilitate patient flow by getting individuals home after a hospital stay, and maintain independence and quality of life.

FRAILTY, SARCOPENIA AND MALNUTRITION (OVERLAPPING SYNDROMES)

The concept of frailty and sarcopenia and diagnostic criteria for malnutrition continues to evolve. Malnutrition, frailty and sarcopenia affect a large proportion (~25%) of community dwelling adults[14].

Unintended weight loss, slow gait speed, low energy expenditure, self-reported exhaustion and poor grip strength are all phenotypically associated with frailty but are equally present in sarcopenia (a generalised loss of muscle strength and muscle function) and in malnutrition[15]. *Table 1 illustrates key components of frailty and illustrates the inter-relationship between frailty, sarcopenia and malnutrition[16].*

Table 1: Key components of frailty

Adapted from Ni Lochlainn et al, Nutrition and Frailty: Opportunities for Prevention and Treatment. Nutrients 2021[16]

Physical	Psychosocial
Sarcopenia	Cognition
Multimorbidity	Psychological well-being
Polypharmacy – medication side effects	Reduced mobility / disability
Oral health and dentition	Social isolation/loneliness/support network
Appetite and anorexia of ageing	Socio-economic status
Immunosenescence and inflammation	Cultural
	Attitude to life

Just as the likelihood of frailty increases with increasing age, acute and chronic, progressive diseases and hospitalisation, so does malnutrition and sarcopenia[17]. There is considerable overlap between the three syndromes and one can perpetuate the other (see figure 2).

Sarcopenia* is common among adults of older age but can also occur earlier in life. Disease, inactivity, and poor nutrition can all contribute[17]. Whilst sarcopenia can arise in the absence of malnutrition from muscle disuse or a lack of muscle stimulation (e.g. as a result of acute or progressive disease, bed rest, immobility), individuals with malnutrition have been found to have approximately three to four times the risk of developing sarcopenia than those without malnutrition[18,19].

Malnutrition** plays a key role in the pathogenesis of sarcopenia and frailty and the prevalence of malnutrition increases with increasing severity of frailty[20]. Despite its prevalence and link to frailty, malnutrition continues to be under-reported and under-treated in primary care[21]. In addition, weight loss is still mistakenly perceived as an inevitable part of ageing or disease and therefore even if identified may go untreated.

As poor nutritional status is considered a key contributory factor influencing the development of frailty, strategies to treat and prevent frailty should consider the management of nutrition as a modifiable factor to be addressed and managed[16,22]. Unplanned weight loss, poor appetite, loss of interest in food, eating and drinking difficulties, diminished access to food, or the lack of ability or motivation to access food, prepare it and cook, are all hallmarks of an increased risk of malnutrition. All are potentially amenable to intervention according to an individual's circumstances.

Although malnutrition and sarcopenia are often associated with low body weight, they are increasingly observed in adults aged 65 years and over, who are overweight or obese[19]. With two thirds of the UK adult population now overweight or obese[23], malnutrition and sarcopenia arising from disease and poor nutritional intake, may be masked by a high body mass index (BMI). Care must therefore be taken to ensure that malnutrition and sarcopenia are not missed in these individuals.

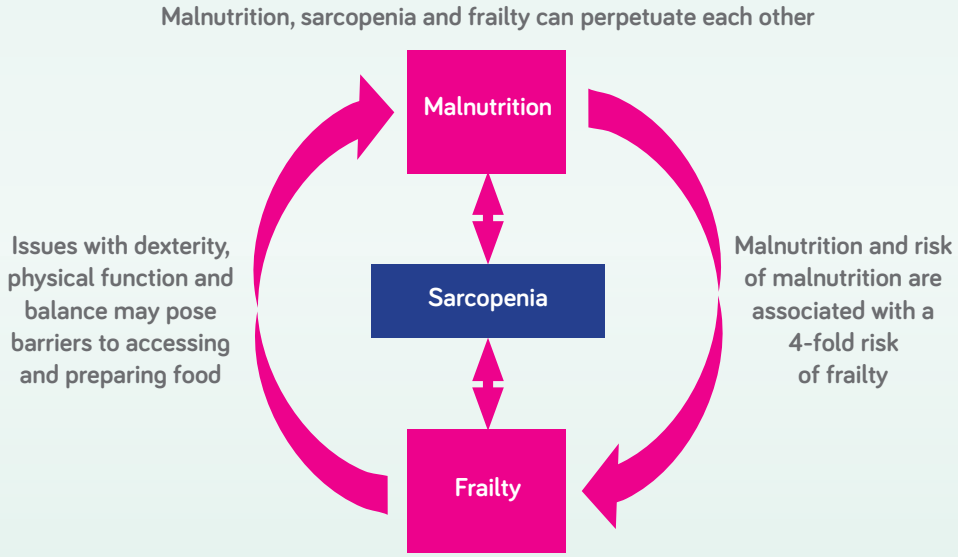


Figure 2: The Frailty Malnutrition Carousel

KEY POINT: In clinical practice, given the overlapping nature of nutrition, muscle strength and frailty, if one finds frailty, one should look for malnutrition or sarcopenia, if one finds malnutrition one should look for frailty and sarcopenia and if sarcopenia is identified one should look for malnutrition and frailty.

* Sarcopenia - A syndrome characterised by progressive and generalised loss of skeletal muscle mass and strength, resulting in reduced physical performance that can contribute to frailty, prolonged physical disability, increased risk of falls, a poorer quality of life and death

**Malnutrition – A deficiency of energy, protein and other nutrients that causes adverse effects on the body (shape, size and composition), the way it functions and clinical outcomes

IDENTIFYING FRAILTY, SARCOPENIA AND MALNUTRITION IN PRACTICE:

FRAILTY

The identification of frailty can be both opportunistic - assessing for frailty in people who present to health and care services, or population-based where a more systematic approach is taken to proactively identify people who might be living with the condition.

Identifying frailty, especially in older adults, typically involves using a variety of tools and assessments. These tools evaluate physical, cognitive, and psychosocial factors to determine a person's vulnerability to health decline and predict the risk of adverse outcomes such as falls, disability, hospitalisation, and mortality. Furthermore, they assist in tailoring care and providing targeted interventions for at-risk individuals[24].

A number of validated tools have been published over the years to identify frailty in an objective and standardised way.

Frailty Identification Tools

- ***Fried Frailty Phenotype (FFP):*** This tool identifies frailty based on five criteria:
  1. Unintentional weight loss
  2. Weakness (measured by grip strength)
  3. Exhaustion
  4. Slow walking speed
  5. Low physical activity

Pre-frailty is present if a person meets 1-2 of these and frailty if at least three of these criteria are met[6]. This tool is predominantly used in research settings.

- ***Clinical Frailty Scale (CFS):*** This is one of the most commonly used tools and gives a score ranging from 1 (very fit) to 9 (terminally ill), assessing a person's overall fitness and frailty based on clinical judgment of their health, energy, and activity levels[25]. It is user friendly and quick to apply in a variety of clinical setting across primary and secondary care. It requires minimum training for use by clinical and allied healthcare staff[26]. CFS also allows for scoring frailty in a patient with dementia with the degree of frailty corresponding to the degree of dementia. The scale facilitates communication across healthcare teams by providing a standardised framework for discussing frailty, tailoring interventions to prevent adverse outcomes and personalised care planning. A CFS app has been designed and made available to download free for smart devices.
- ***Electronic Frailty Index (eFI):*** This is a population-based risk stratification tool embedded in Electronic Health Records used in primary care in England to support early identification of frailty. The eFI uses routine health record data to automatically calculate a score which can identify whether a person in likely to be fit or living with mild, moderate or severe frailty[27]. Early identification of frailty should lead to assessment and interventions in the community to promote independent living through reducing the risk of adverse outcomes such as falls, hospital admissions and adverse drug events related to polypharmacy.

Many other frailty assessment scales have been published over the years such as Edmonton Frailty Scale, PRISMA-7 Questionnaire, Geriatric 8 (G8) and Short Physical Performance Battery (SPPB). Once frailty is identified through any of these validated tools, a holistic multidisciplinary comprehensive assessment is necessary to facilitate individually tailored interventions.

SARCOPENIA

In the acute setting and specialist units, skeletal muscle mass can be assessed by body composition methods such as CT scans, DEXA and bioimpedance[28]. In community settings, practical evidence-based tools can be used such as the SARC-F questionnaire[29] – a 5-item questionnaire to determine the likelihood of sarcopenia. A score of ≥4 suggests sarcopenia is likely. The SARC-F questionnaire should be followed by simple strength measurements, such as hand-grip strength and the 30 second chair stand test (for further information on these measures see box 1).

FUNCTIONAL ASSESSMENTS TO DIAGNOSE POOR MUSCLE HEALTH

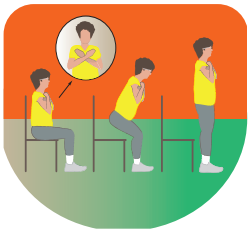
All encounters with health and social care professionals provide the opportunity to assess for frailty in those who are vulnerable - simple clinical observations such as observing how an individual walks across the clinic room or gets up out of a chair can be a useful indicator of frailty. Hand grip dynamometry, the gait speed test and 30 second chair stand test are recommended as more formal assessments of muscle strength and function[1].

Hand Grip Strength

The routine measurement of grip strength using a relatively low-cost piece of equipment, a dynamometer, could help identify individuals at risk of frailty. Measurements of <20 kg for females and <30 kg for males indicate frailty[30].

Gait Speed Test

A simple assessment of functional mobility which can be done on any individual who is able to walk 4 metres. It measures total distance in metres/time in seconds – anyone with a gait speed of less than 0.8m per second requires further assessment[31].



30 second chair stand test

Sit in the middle of a straight backed chair with no arm rests. Place hands on the opposite shoulder crossed, at the wrists. Keep feet flat on the floor, back straight, and arms against the chest. Record number of times person can rise to a full standing position and then sit back down again in 30 seconds. A below average score indicates falls risk[32]

AGE	MEN	WOMEN
60-64	<14	<12
65-69	<12	<11
70-74	<12	<10
75-79	<11	<10
80-84	<10	<9
85-89	<8	<8
90-94	<7	<4

Box 1: Measuring Muscle Strength

MALNUTRITION AS A POTENTIAL RISK FACTOR FOR THE CAUSE AND PROGRESSION OF FRAILTY

NICE recommends that a validated screening tool, such as the Malnutrition Universal Screening Tool ('MUST')[33] is used to identify adults at risk of malnutrition, this combines assessment of BMI, recent unplanned weight loss and presence of acute illness. For patients who are digitally literate, use of the Malnutrition Self-Screening website can be encouraged, along with reporting of results direct to the community healthcare team e.g. GP surgery. The Patient's Association Nutrition checklist is also a useful alternative to facilitate self-screening amongst individuals, involving family members if needed.

In individuals who are identified as malnourished, or at risk, undertaking further assessment to identify the issues interfering with the ability to eat and drink, and addressing those that can be reversed or modified, should be an integral component of the treatment plan[34]. For example:

- treatments and medications can have side effects which can impact on nutritional status, eating and drinking
- weakness and disability e.g. loss of dexterity, poor physical function and being unable to stand for a period, can have a detrimental effect on dietary intake and nutritional status by impacting on the patient's ability to access and prepare food.

Figure 3 summarises the combined use of 'MUST' and SARC-F as a screen for malnutrition and sarcopenia and potential next steps to take based on risk. The Malnutrition Pathway Managing Adult Malnutrition in the Community document includes further advice on screening, assessment and management of malnutrition.

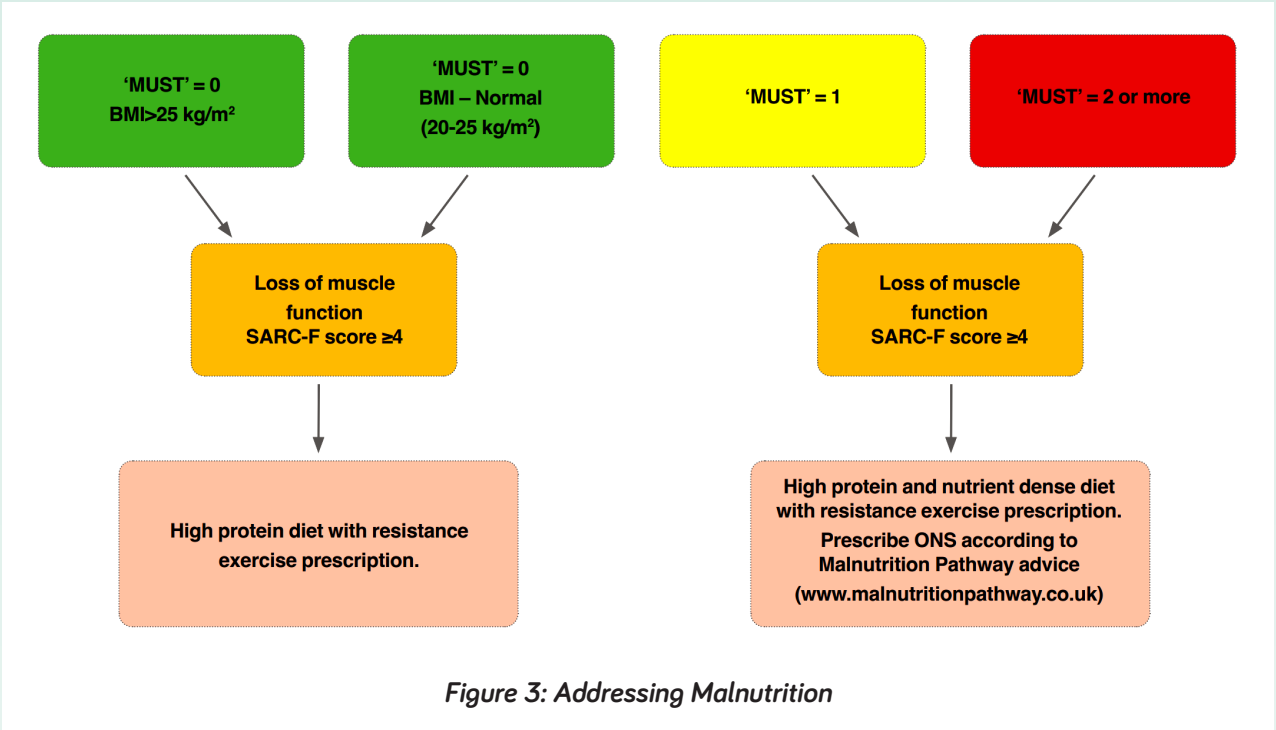


Figure 3: Addressing Malnutrition

MANAGEMENT OF FRAILTY

To reduce the clinical and economic burden of frailty, efficient, feasible, and cost-effective interventions to prevent or slow deterioration, maintain independence and maintain or improve quality of life[35] are critical. Supporting people with frailty in the community including preventative actions, has the capacity to keep individuals in better health, preserve independence e.g. within the home and in familiar surroundings, for longer, subsequently reducing pressure on the wider health and care system and optimising patient flow e.g. discharge[9].

Healthy ageing including good nutrition, keeping alcohol to within recommended limits if consumed, staying physically active and remaining engaged in the local community (avoiding loneliness) reduces the risk of developing frailty[36].

KEY POINT:
Frailty, sarcopenia and malnutrition should not be considered an inevitable part of ageing and disease, all are amenable to interventions which should include nutrition, exercise (activity) and review of medicines[17,37].

ADOPTING A PERSON-CENTRED, HOLISTIC APPROACH TO THE TREATMENT AND PREVENTION OF FRAILTY

The comprehensive geriatric assessment (CGA) is considered a vital framework for managing older people suspected of having frailty. The CGA seeks to evaluate areas of health and care needs that contribute to frailty and influence quality of life. Figure 4 outlines the approach to managing frailty using CGA.

The British Geriatrics Society has produced a CGA toolkit for GPs[38] and other healthcare professionals working in primary care settings, this explains the CGA in more detail, outlining what circumstances to use it in and how to co-ordinate planning and involvement of social services. It also includes guidance on specific medical issues that older patients may present with.

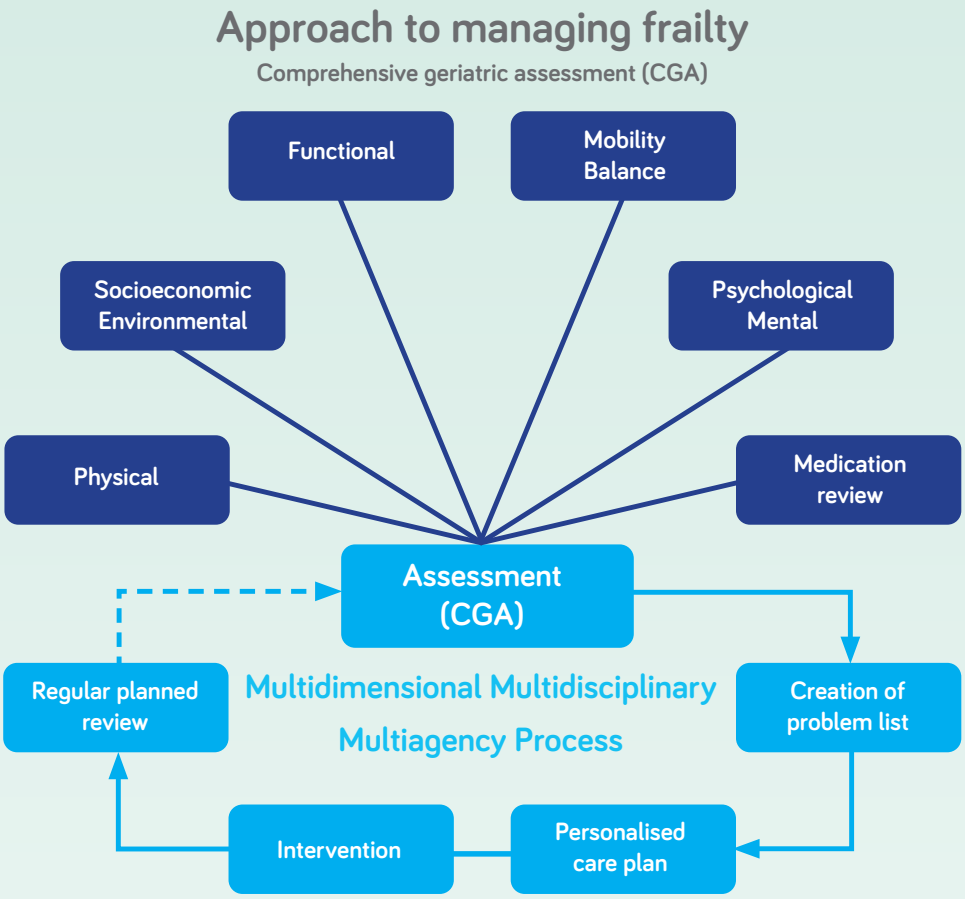


Figure taken from Comprehensive Geriatric Assessment Toolkit for Primary Care Practitioners. British Geriatrics Society (2019). Available at: www.bgs.org.uk/cgatoolkit Reproduced with permission.

Figure 4: Approach to Managing Frailty using CGA

NUTRITION, EXERCISE AND HYDRATION

Exercise and nutrition remain a cornerstone of treatment for the management of malnutrition, sarcopenia and frailty. Exercise can help to preserve or improve muscle strength, balance, and endurance. Good nutrition is essential to support muscle strength and overall health and well-being. People living with, or at risk of frailty, will often need help and advice to ensure that they are getting enough calories, protein, and other essential nutrients. Research on physical exercise and nutritional interventions show promising effects on frailty status, functional outcomes, and cognitive outcomes[35].

Immobility, poor nutrition and inflammation associated with disease, trigger and accelerate muscle loss[31]. Whilst historically body weight and nutritional intake have often been relied upon as outcome measures, this approach may fail to measure the real impact of interventions, including nutrition interventions, in combination with physical therapy, on functional outcomes and quality of life[39]. With the increasing evidence that nutrition and movement make a positive difference to health outcomes, it is important that muscle strength and function through optimal nutrition and physical exercise (particularly resistance activity) is considered. The synergistic effect of exercise and protein can facilitate the reversal of some elements of frailty. A combination of muscle strength training and protein supplementation has been found to be the most effective intervention to delay or reverse frailty and the easiest to implement in primary care[40].

BUILDING MUSCLE – KEY NUTRIENTS - THE PROTEIN FACTOR

Muscles work to support the body and enable movement, they are important for mobility, balance, posture, strength and energy. Our muscles are in a constant state of turnover – being broken down and rebuilt (synthesised). Many factors influence muscle breakdown and synthesis including hormones, activity, nutrition, age, health and illness. As we age the body becomes less adept at using protein for muscle synthesis. During illness we also tend to break down our muscles to release essential amino acids to support the immune system. For this reason daily requirements for protein are higher as we age and in disease (see table 2)[41,42].

PROTEIN QUALITY

The quality of the protein in our diet, or more specifically the amino acids which are the building blocks of protein, are a key determinant of the capacity for protein to influence muscle health[43]. The amino acid leucine and its derivative ß-hydroxy-ß-methylbutyrate (HMB) are receiving increasing attention in their role in muscle mass and function. Both leucine and HMB have been shown to stimulate muscle protein synthesis, whilst HMB has also been shown to preserve muscle mass by reducing muscle breakdown, subsequently improving clinical outcomes such as wound healing, physical function and mortality[44-50].

	Protein requirements g/kg body weight per day	Example daily protein requirements of a:	
		70kg male	55kg female
Healthy older adults	1.0 - 1.2g	70 - 84g	55 - 66g
Older adults with an acute/chronic condition	1.2 - 1.5g	84 - 105g	66 - 83g
Older adults with severe illness/injury	>1.5g	>105g	>83g

Table 2: Recommended Protein Requirements for Older Adults

ACHIEVING AN ADEQUATE INTAKE OF PROTEIN IN EVERYDAY PRACTICE

Multiple studies have indicated that 25–30 g of high-quality protein is necessary at each meal to optimally build or maintain muscle in older people and those who are unwell[41,51-54]. As appetite can diminish with increasing age and when unwell, this can be difficult to achieve without nutritional support and dietary advice[41,55]. Research shows that protein intakes among older adults, those who are unwell and those who are malnourished or at risk of malnutrition, are often inadequate[42,56].

Individuals should be encouraged to eat 3-4 portions of high protein foods per day. When appetite is poor, eating three smaller meals along with snacks or milky drinks in between may help achieve nutritional requirements. Diet variety is important but good sources of protein include meat, fish, eggs, and dairy foods such as milk, yogurt and cheese. Plant-based sources of protein include soy and tofu, beans, pulses, nuts and seeds. The amino acid leucine can be found in foods such as beef, chicken, pork, dairy foods, soybeans and tofu, and in smaller amounts in eggs and seeds (e.g. pumpkin seeds).

Further information and ideas on including protein rich foods in the diet can be found on the **Malnutrition Pathway website**.

PROTEIN SUPPLEMENTATION

When protein intake from diet alone is insufficient, oral nutritional supplements (ONS) may be needed in addition to dietary advice, to meet requirements. ONS, particularly high protein ONS, have been shown to significantly improve protein intakes and clinical outcomes[57], and may be useful to consider for patients at high risk of malnutrition and where sarcopenia is present.

The protein content of ONS can vary considerably, some have added leucine or HMB. It is important to consider the nutritional content of the product and whether it can optimally address the nutritional deficits and meet requirements and achieve the desired outcomes, dietitians are specifically skilled in this aspect of care.

ONS also provide additional energy, and the majority also provide essential micronutrients (minerals and vitamins including Vitamin D) to improve overall nutrient intakes.

When choosing the most appropriate ONS for your patient, consider individual patient needs, including flavour preferences, mouthfeel, appetite and the capacity to manage larger volumes, along with dexterity, physical ability and cognitive function to be able to act on the advice, and follow instructions including making up a powdered supplement for example.

Further information on oral nutritional supplements can be found on the **Malnutrition Pathway website**.

VITAMIN D SUPPLEMENTATION

Vitamin D is involved in many physiological functions, including musculoskeletal health. Insufficient levels are associated with frailty and negative health outcomes[58].

About half of our Vitamin D comes from diet and the remainder from the action of sunlight on the skin. Foods rich in Vitamin D include oily fish, red meat, liver, egg yolks and foods that have been fortified with Vitamin D such as some fat spreads, milks including plant-based milks and breakfast cereals.

In the UK, an over-the-counter Vitamin D supplement is recommended to provide an additional 10 micrograms (10 mcg), or 400 IU, a day for those over 65 years of age, anyone who spends a lot of time indoors, during the autumn and winter months when the level of sunlight is low, and in those who cover their skin or have dark skin. Vitamin D3 versions are better absorbed by the body. A therapeutic dose of Vitamin D may need to be prescribed in those with overt deficiency (serum 25-hydroxyvitamin D <25 nmol/L) identified from a blood test[59].

EXERCISE / RESISTANCE ACTIVITY

Exercise in combination with diet is important to enhance uptake of protein by muscles and to enhance muscle synthesis. Individuals whose exercise is limited or who have rarely participated in exercise, should be encouraged to attend structured exercise programmes. These are usually delivered over several weeks or months and should be designed to improve strength and balance which can in turn improve mobility, maintain independence and reduce the risk of falls[42,60].

Individualised regimes with supervision from appropriately qualified healthcare professionals (e.g. physiotherapists) may be needed. It is important that activity advice is tailored to the individual's history bearing in mind that what may be a little amount of activity to one person may be a considerable amount to others.

Individuals should be encouraged to start slowly and increase the intensity and duration of their workouts over time ideally working up to 30 - 60 minutes of activity per day. **The NHS Live Well website** has a number of suggested activities for strengthening muscles ranging from simple chair exercises for those who are less active, to more strenuous activities such as heavy gardening or lifting weight, for those who are more physically active. **Age UK** also produces some useful advice on getting more active.

HYDRATION

In all individuals, care should be taken to ensure advice is given on keeping adequately hydrated. Dehydration can cause low blood pressure, dizziness and confusion, which in turn can lead to an increased risk of falls.

Individuals should be advised to try to drink at least 6 to 8 cups of fluid every day and possibly more if individuals are losing fluid through diarrhoea, exercise or a warm environment. With the exception of alcohol, all fluids consumed count towards meeting fluid requirements - water, juice, milky drinks, tea, coffee and oral nutritional supplements.

MEDICATION MANAGEMENT

People living with, or at risk of frailty, often take multiple medications, increasing the likelihood of side effects. Inappropriate polypharmacy may worsen underlying malnutrition as side-effects of medications (poor appetite, nausea, vomiting, constipation, diarrhoea, or low mood) contribute to a diminished food intake. In addition, antihypertensive medications have been associated with an increased risk of serious fall injuries, particularly among those who have had a previous fall[61]. It is important therefore that individuals at risk of frailty undergo structured medication reviews so that medications that no longer confer a benefit or pose a health risk or harm, can be rationalised or discontinued and ensure that the older adult is taking the right medications at the right doses.

FALLS AND FRAGILITY FRACTURE PREVENTION

Falls are a major risk for frail older adults. Fall prevention interventions can help to reduce the risk of falls and their consequences. Appropriate management of osteoporosis should also be considered in order to minimise the risk of fragility fractures.

SOCIAL SUPPORT

Social isolation can contribute to frailty. Social support interventions can help to connect people with their community and provide them with emotional support. Consider the use of social prescribers to assist in accessing support to assist food purchase and meal preparation as well as identify potential challenges. The Malnutrition Pathway website includes further information on **the role of social prescribers in nutritional care**.

COGNITIVE FUNCTION

Physical frailty is quite often accompanied by cognitive impairment[62] and there is often a bi-directional relationship between the two conditions. Delirium, acute confused states, falls and functional decline are both a cause and a consequence of escalating care needs. Malnutrition risk has also been found to be linked to the progression of dementia[63-65]. It is important therefore to identify these issues which are common in frail individuals.

CO-MORBIDITY OPTIMISATION

It is also important to optimise the management of any co-morbidities including long-term conditions such as COPD, cancer or heart failure - small gains made across multiple domains could help improve the QoL of the individual concerned.

KEY POINT:

Frailty management is an ongoing process that requires regular assessment and adjustment of interventions. The goal is to slow or prevent deterioration to improve the health and well-being of the frail person, and to help them to live as independently as possible.

INTERVENTIONS

Interventions should focus on life-course progression (e.g. prefrailty, mild frailty, severe frailty) and the continuum of care (mild versus advanced care planning). They need to be realistic and pragmatic with easy-to-measure outcome parameters, for example symptom management, quality of life (QoL), activities of daily living or fatigue scores[39].

Goals of any intervention should be co-created and agreed with the individual taking into consideration disease stage, overall treatment / healthcare aims, and what matters to the individual. Appropriate review and follow-up need to be in place including which health or care professional is responsible for monitoring.

Advanced care planning is an important consideration, particularly for individuals with more severe frailty (CFS 7 and above), to ensure support is appropriate and acceptable as time progresses. This should be underpinned by an understanding of an individual's personal values, life goals, and preferences regarding the provision of medical care in the future.

SUMMARY

- Frailty is not an inevitable part of ageing or disease
- With an increasingly aged population living with multiple long-term conditions, lack of action to treat or prevent frailty will result in increasing numbers of individuals being affected by frailty
- If we fail to identify and treat frailty, we place individuals at risk of adverse outcomes including the detrimental effects on the health and quality of life of the individuals affected (and their families) and subsequent economic and clinical pressures on the health and care systems
- The NHS Long Term plan recognises that services are not consistently joined-up or responsive to the needs of people living with frailty and has outlined the need to identify and provide proactive support to older people living with frailty in the community[66]
- There are simple tools available to assist in the identification of frailty along with tools for identifying malnutrition and sarcopenia that are key contributory factors amenable to intervention.
- Person-centred interventions to address deficits in nutrition, physical function and activity, cognition and social engagement are key to ensuring positive outcomes
- Management should utilise nutritional and physical interventions alongside medication reviews to delay, slow or reverse frailty

This factsheet has been produced with an unrestricted grant from Abbott

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