Use of proactive case management to address frailty in older people

In this article...
- Different tools available for the detection and assessment of frailty
- Components of a comprehensive geriatric assessment
- Case study illustrating how frailty is detected and managed in an older person

Key points
1. Frailty is a common age-related condition characterised by a decline in health, cognition, physical strength and social functioning.
2. Its effects can be reduced or reversed, but frailty often goes unrecognised until it is advanced or a crisis occurs.
3. A number of characteristic features can help health and social care professionals recognise frailty in older people.
4. A comprehensive geriatric assessment and person-centred care plan can help older people with frailty live well for longer.
5. Good care for frail older people requires close partnership working, appropriate referrals and a coordinated approach.

Authors
Lynne Yates is advanced nurse practitioner at Derbyshire Community Health Services.

Abstract
Frailty is a common age-related condition that occurs when several physiological systems lose reserve and function. All health and social care professionals need to be able to recognise frailty in their older patients and clients, and put in place an appropriate assessment and care plan. This article highlights the characteristic syndromes and features that should raise suspicion of frailty in health and social care professionals. It describes several detection and assessment tools available to them, and stresses the importance of comprehensive geriatric assessments and person-centred care plans in improving outcomes for people with frailty, thereby helping them to live well for longer.

Citation

What is frailty?
Frailty is a common, age-related condition that occurs when several physiological systems lose reserve and function (NHS England, 2014). It is characterised by a decline in health, cognition, physical strength and social functioning. In 2016 there were a total of 11.6 million people aged over 65 in the UK – approximately 17% of the total population; by 2040, it is estimated that this figure will have risen to 24% of the population (Age UK, 2017). As this age group has the highest number of unplanned admissions to hospital, this growth is predicted to lead to further pressures on acute hospitals (Age UK, 2017; Imison et al, 2012).

Nurses in all specialties and settings will be increasingly confronted with older people living with frailty (British Geriatrics Society, 2015). As such, it is important that all nurses are capable of recognising frailty and planning appropriate care for this group. Proactive case management of older people living with frailty entails:
- Case finding;
- Person-centred care planning;
- Better use of resources in the community.

Case management can reduce hospital admissions by 20-30%, which in turn helps older people to live well for longer (BGS, 2015; Lyndon and Stevens, 2014).

Box 1. The frailty syndromes
- Falls (eg collapse, legs giving way, “found lying on floor”)
- Immobility (eg sudden change in mobility, “gone off legs”, “stuck in toilet”)
- Delirium (eg acute confusion, “muddledness”, sudden worsening of confusion in someone with previous dementia or known memory loss)
- Incontinence (eg change in continence – new onset or worsening of urine or faecal incontinence)
- Susceptibility to side-effects of medication (eg confusion with codeine, hypotension with antidepressants)

Source: British Geriatrics Society (2014)
Review

Health and social care professionals should be able to identify frailty in older people early in health, cognition, physical strength and social functioning, and by the impact of decline on any long-term condition the person may have (BGS, 2015; Clegg and Young, 2011; Rockwood et al, 2005). The BGS considers frailty to be a clinical disorder with which the individual becomes vulnerable to subtle health changes that can lead to a rapid decline in wellbeing and function (BGS, 2014). It details five frailty syndromes that should alert health and social professionals to the fact that a patient could be frail (Box 1), and recommends that they consider frailty in older people who present with any of these.

Clegg and Young (2011) identified several features that should raise suspicion of frailty:
- Sarcopenia (loss of muscle mass and strength);
- Anorexia;
- Osteoporosis;
- Fatigue;
- Risk of falls;
- Poor physical health.

Later research emphasises that frailty is a complex syndrome that is not limited to the physical presentation of loss of function, but also includes psychological and social impairment. The psychosocial element of frailty is poorly researched and addressed by health professionals in general (BGS, 2015).

Frailty can have a profound effect on mental health, leading, in the worst cases, to depression and social isolation (Fillit and Butler, 2009). The words ‘frail’ and ‘frailty’ themselves can have a psychological impact on older people and deter them from seeking early support and interventions. If they suspect frailty, health and social care professionals need to approach assessment and care planning in a sensitive way, and engage with their patients or clients to lift their health status, help them live well, and potentially reverse the effects of frailty (BGS, 2015; NHS England 2014; Lyndon and Stevens, 2014).

The need for early recognition
If frailty is recognised early its effects can be reduced; however, those affected are not always reliably identified by health and social care professionals, or are identified only when frailty is at an advanced stage. Often frailty is only recognised after an emergency situation, such as a fall. Any delay in detecting frailty can potentially lead to harm and poorer outcomes for the person (Age UK, 2016; BGS, 2015, 2014).

Health and social care professionals should conduct a frailty assessment in individuals who present with at least one of the frailty syndromes or with any of the characteristics of frailty listed above. They should use every encounter with older people to check for frailty. In particular, health and social care professionals who are not specialists in the care of older people need to be aware of the importance of their role in identifying frailty (Age UK 2016; BGS, 2015, 2014).

Tools to detect and assess frailty
A number of assessment tools can be used to identify frailty and assess its severity, including:
- The PRISMA-7 questionnaire (Box 2);
- The Gait speed test (Box 3).

Box 2. PRISMA-7 questionnaire
The PRISMA-7 questionnaire comprises seven questions. If the individual gives a total of three or more positive answers, frailty is indicated.

The seven questions are:
- Are you more than 85 years old?
- Are you male?
- In general, do you have any health problems that require you to limit your activities?
- Do you need someone to help you on a regular basis?
- In general, do you have any health problems that require you to stay at home?
- In case of need, can you count on someone close to you?
- Do you regularly use a stick, walker or wheelchair to get about?

Source: British Geriatrics Society (2014)

Box 3. Gait speed test
An average gait speed of longer than five seconds to walk four metres is an indication of frailty. Using the guidelines below, the test can be performed with any patient able to walk that distance.

- Accompany the patient to the designated area, which should be well lit, unobstructed and contain clearly indicated markings at the start (zero metres) and finish (four metres)
- Position the patient with his/her feet behind and just touching the start line
- Instruct the patient to “Walk at your comfortable pace” until a few steps past the four-metre mark (the patient should not start to slow down before this mark)
- Begin each trial on the word “Go”
- Start the timer with the first footfall after the start line
- Stop the timer with the first footfall after the four-metre line
- Repeat three times, allowing sufficient time for recuperation between trials

Source: Lyndon and Stevens (2014)
Comprehensive geriatric assessments
After frailty has been identified, a comprehensive geriatric assessment (CGA) needs to take place to improve outcomes for frail older people in all health and social care settings (Ellis et al, 2011; BGS, 2010). A CGA is a holistic, multidisciplinary assessment of an older person living with frailty, and it is used to formulate a person-centred advance care plan (BGS, 2014). It can be requested by any health or social care professional involved in the person’s care and is usually carried out by the professional who has identified that the person is frail (BGS, 2010).

There is currently no standard CGA but, in 2014, NHS England reported that a CGA tool was being developed for use by all partnership organisations (Lyndon and Stevens, 2014). The BGS (2010) suggested the assessment is best performed as a multidisciplinary team (MDT) exercise and must encompass the following key areas:

- Medical: a full medical assessment should be undertaken that considers comorbidities, includes a medication review and a nutritional assessment, looks for weight loss and considers appetite;
- Mental health: cognition, mood and fears should be assessed, while

### Table 1. The Edmonton Frail Scale

<table>
<thead>
<tr>
<th>Frailty domain</th>
<th>Item</th>
<th>Score 0</th>
<th>Score 1</th>
<th>Score 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognition</td>
<td>Imagine this pre-drawn circle is a clock. Place the numbers in the correct positions, then place the hands to indicate a time of 10 past 11</td>
<td>No errors</td>
<td>Minor errors</td>
<td>Other errors</td>
</tr>
<tr>
<td>General health status</td>
<td>In the past year, how many times have you been admitted to hospital?</td>
<td>0</td>
<td>1-2</td>
<td>&gt;2</td>
</tr>
<tr>
<td></td>
<td>In general, how would you describe your health?</td>
<td>Excellent, very good or good</td>
<td>Fair</td>
<td>Poor</td>
</tr>
<tr>
<td>Functional independence</td>
<td>With how many of the following activities do you require help: meal preparation; shopping; transportation; telephone; housekeeping; laundry; managing money; taking medications?</td>
<td>0-1</td>
<td>2-4</td>
<td>5-8</td>
</tr>
<tr>
<td>Social support</td>
<td>When you need help, can you count on someone who is willing and able to meet your needs?</td>
<td>Always</td>
<td>Sometimes</td>
<td>Never</td>
</tr>
<tr>
<td>Medication use</td>
<td>Do you use five or more different prescription medications on a regular basis?</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>At times, do you forget to take your prescription medicines?</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Nutrition</td>
<td>Have you recently lost weight such that your clothing has become looser?</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Mood</td>
<td>Do you often feel sad or depressed?</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Continence</td>
<td>Do you have a problem with losing control of urine when you don’t want to?</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Functional performance</td>
<td>Timed Up and Go test (Box 4)</td>
<td>0-10 seconds</td>
<td>11-20 seconds</td>
<td>&gt;20 seconds, patient unwilling or requires assistance</td>
</tr>
</tbody>
</table>

Total final score is the sum of column totals out of 17:
Scoring: 0-5 = not frail; 6-7 = apparently vulnerable; 8-9 = mild frailty; 10-11 = moderate frailty; 12-17 = severe frailty

#### Box 4. Timed Up and Go test

- Measures, in seconds, the time taken by the patient to stand up from a standard armchair, walk a distance of three metres, turn, walk back to the chair and sit back down
- A time of >30 seconds is predictive of requiring aids for mobility and being dependent with activities of daily living

Source: Podsiadlo and Richardson (1991)
**Box 5. Case study: comprehensive geriatric assessment and care plan**

Florence Baker, aged 91, is admitted to the rehabilitation ward from A&E after a fall at home. She reports having felt dizzy and losing her balance when trying to get up from her recliner, but did not lose consciousness. Ms Baker attended the local A&E at the acute hospital, where it was deemed that she had not sustained any obvious injury, including no head injury. However, because she was not back to her usual level of mobility, she has been referred to the community hospital for rehabilitation. On admission, a PRISMA-7 questionnaire is completed with Ms Baker and her daughter Sarah, who is 70 years old. Ms Baker scores 5/7, which strongly indicates frailty.

All people admitted to the rehabilitation ward undergo a CGA. The ward’s MDT – composed of an advanced nurse practitioner, ward-based nurses, a physiotherapist and an occupational therapist – undertakes a CGA for Ms Baker. Its outcomes and the actions taken are shown below. From the CGA, a plan of care is formalised.

After 18 days, Ms Baker is discharged home with a package of care that includes visits for personal care, meal preparation and prompting with medications. She is given a prompt card to remind her of medication times and doses. The community dietitian is planned to review her nutritional needs at home. The OPMH team also refers Ms Baker to the community mental health team for review and support. The community matron will support her and coordinate her care using a case management approach.

<table>
<thead>
<tr>
<th>Medical</th>
<th>Past medical history:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Vascular dementia</td>
</tr>
<tr>
<td></td>
<td>Hypertension</td>
</tr>
<tr>
<td></td>
<td>Recurrent falls (six in last year)</td>
</tr>
<tr>
<td></td>
<td>Fractured right distal radius</td>
</tr>
<tr>
<td>Medications:</td>
<td>Ramipril 5mg daily</td>
</tr>
<tr>
<td></td>
<td>No adherence issues</td>
</tr>
<tr>
<td></td>
<td>No allergies</td>
</tr>
<tr>
<td>Nutritional risk:</td>
<td>Weight: 49kg</td>
</tr>
<tr>
<td></td>
<td>Body mass index: 19</td>
</tr>
<tr>
<td></td>
<td>Family reports recent weight loss of about 1 stone</td>
</tr>
<tr>
<td></td>
<td>MUST score (BAPEN, 2011): high</td>
</tr>
</tbody>
</table>

**Problems:** Ms Baker has reported feeling dizzy on standing; she is prescribed ramipril 5mg daily for her hypertension; she has sustained a fragility fracture of the distal radius after a previous fall; she is not taking medication for bone protection and has a normal vitamin D level. Her high MUST score means she is at increased risk of malnutrition.

**Actions:**
- Lying and standing blood pressure measurements over three days show that Ms Baker has postural hypotension, so her ramipril dose is reduced.
- She is commenced on oral bone protection medication.
- Dietary supplements are prescribed, her weight and MUST score are calculated weekly, she is commenced on diet charts and offered frequent small meals and snacks. Assistance and supervision for meals and drinks are provided as needed, and Ms Baker is also referred to the dietitian.
- A referral is made to the community matron team for case management on discharge.

<table>
<thead>
<tr>
<th>Mental health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ms Baker was diagnosed with vascular dementia four years ago by memory services. An abbreviated mental test is completed on admission, as per trust policy, and she scores 8/10. Her family reports no changes to her memory before admission. During her stay, Ms Baker is bright and alert. Neither the MDT, Ms Baker nor her family report any obvious issues with mood or anxiety, but her family does report that there was a decline in her functionality at home before the latest fall.</td>
</tr>
</tbody>
</table>

**Problems:** Considering the outcomes of the CGA, it is deemed Ms Baker has the mental capacity to make informed decisions about her care and discharge destination – she wishes to return home. The Mental Capacity Act 2005 determines how to assess mental capacity and protects those found to lack mental capacity (Social Care Institute for Excellence, 2016).

**Actions:** Ms Baker is referred to the OPMH liaison service for review of her cognition once back at home.

<table>
<thead>
<tr>
<th>Functional ability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Until four weeks before her fall, Ms Baker had been able to manage her care needs: she was transferring independently, was mobile with a stick, could prepare her meals and make herself a hot drink. However, in recent weeks there has been a clear decline in her functional ability. On the rehabilitation ward, she needs help with all care. She remains continent but is very unsteady and her transfers are poor: to walk she needs a wheeled Zimmer frame and one person’s help.</td>
</tr>
</tbody>
</table>

**Problems:** Ms Baker experienced a decline in her functional ability in the weeks before admission.

**Actions:**
- MDT assessment of functional ability
- Ongoing therapy to maximise functional ability and assess Ms Baker for suitable aids/equipment for home discharge
- Washing and dressing assessments
- Home visit by a physiotherapist and occupational therapy assistant before discharge

<table>
<thead>
<tr>
<th>Social and environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before her admission Ms Baker lived alone in a bungalow, with no care package. Housebound due to her fear of falling, she walked with a stick. Her daughter, who did the cleaning and shopping, had noticed a decline in Ms Baker’s ability to care for herself in recent weeks, so had to step up her support and was arranging for a social care assessment. Her daughter was finding it increasingly difficult to support Ms Baker due to her own health issues.</td>
</tr>
</tbody>
</table>

**Problems:** Ms Baker has no package of care and no aids or adaptations at home except for a stick. Her only support is her daughter, who is struggling to look after her.

**Actions:**
- Home visit by a physiotherapist and occupational therapy assistant to assess home environment and consider equipment needed
- Referral to social care for assessment and consideration of a care package to facilitate independent living.

A&E = accident and emergency; CGA = comprehensive geriatric assessment; MDT = multidisciplinary team; MUST = Malnutrition Universal Screening Tool; OPMH = older people’s mental health. Names have been changed.
clarification and further information is sought from family members about the person’s memory and function at home;

- Functional ability: an occupational therapist and physiotherapist should assess the person’s ability to undertake activities of daily living, as well as gait and balance and current activity status;

- Social: an assessment of social circumstances is required, exploring what support is available at home, potentially discussing a package of care and considering finances;

- Environment: find out where the person lives, what their home environment is like and whether it is adapted to their abilities and level of functioning.

### Case management and person-centred care planning

After a CGA has been completed, a case management approach to the care of an older person living with frailty is required (Lyndon and Stevens, 2014). This approach is believed to provide more responsive and efficient care; it enables people to be cared for in their preferred place, and allows their wishes and preferences to be considered (Clinical Solutions, 2009).

Case management entails the assessment, coordination and ongoing review of patients’ care, with the aim of enhancing their quality of life (Hutt et al, 2004). Successful case management of frail older people who have complex long-term conditions hinges on interagency and partnership working (Department of Health, 2010; 2004).

A case manager can be a:

- Qualified nurse;
- Social care worker;
- Allied health professional.

All of these professionals will work with people with complex long-term conditions requiring care coordination (DH, 2005a). The presence of a case manager means there is time for a therapeutic relationship to develop, and gives patients and their carers the opportunity to contribute to care planning (The Health Foundation, 2014).

Completion of a CGA also leads to the formulation of a person-centred care plan, tailored to individual preferences and responding to the person’s needs; this can improve the health outcomes of vulnerable older people most at risk of frailty (DH, 2005b). A successful person-centred care plan requires close partnership working (Ross et al, 2011), and the case manager needs to make – with the individual’s consent – appropriate referrals to allied health professionals and social care to ensure there is a coordinated approach to care.

The case study in Box 5 demonstrates how a CGA can help to formulate a person-centred care plan and generate referrals to other services, ensuring the approach to care is holistic.

### Conclusion

Frailty is an often poorly recognised age-related condition. The ageing population means that all specialties in nursing will increasingly encounter older people who are living with frailty.

Nurses play an important role in the early detection of frailty, which can help improve wellbeing and avoid unplanned hospital admissions. The early identification of frailty allows health and social care professionals to implement person-centred care plans, thereby increasing the chance of reversing frailty and helping older people to live well for longer. NT

### References

- British Geriatrics Society (2014) Fit for Frailty: Consensus Best Practice Guidance for the Care of Older People Living with Frailty in Community and Outpatient Settings. Bit.ly/BGSFitForFrailty

### Quick Fact

- 24% Percentage of the UK population expected to be aged 65 by 2040

### Nursing Times Self-assessment

Test your knowledge with Nursing Times Self-assessment after reading this article. If you score 80% or more, you will receive a personalised certificate that you can download and store in your Nursing Times Learning Passport or professional portfolio as CPD or revalidation evidence.

Visit nursingtimes.net/NTSAFrailty to take the test.

The article is also accompanied by an online handout with author commentary and discussion points for use in journal club meetings. Go to nursingtimes.net/NTJCFrailty to download the handout.