The Role of the Community and Primary Care Nurses in Supporting Frail Patients in Care Homes

Community and Primary Care nurses need education in managing patients with frailty in care homes preparing them for the Long Term Plan (NHS England, 2019). Many nurses have contact with frail residents in care homes as part of their routine activity. The term care home includes homes with and without nursing provision (British Geriatrics Society (BGS), 2016). The role of nurses caring for frail patients in care homes is important due to patients complex care needs, co-morbidities, long term conditions, disability and polypharmacy.

When nurses have contact with patients in care homes, often for routine activity such as wound care, medication administration or continence management, nurses can use this as an opportunity for an assessment of the patient for frailty.

"Any interaction between an older person and a health or social care professional should include an assessment which helps to identify if the individual has frailty" (BGS, 2014)

Identification of frailty is important as it may be reversible by addressing factors which contribute to frailty (Uchmanowicz et al, 2018). By identifying patients who are frail, nurses have an opportunity to work in partnership with patients, carers, General Practitioners (GP), pharmacists and the wider multidisciplinary team (MDT) to address factors which may contribute to frailty, leading to better health outcomes for patients.

What is Frailty?

Frailty is considered a long term condition affecting 10% of people over 65 years and up 50% over 85. Gobbens et al (2010, p 175) describes frailty as;

‘A dynamic state affecting an individual who experiences losses in one or more domains of human functioning (physical, psychological, social), caused by a range of variables and which increases the risk of adverse outcomes’
A combination of age, genetic and environmental factors, contribute to a decline in multiple body systems leading to vulnerability in regard to sudden health status changes, often triggered by minor stress, illness or personal events (Clegg et al, 2013). Consequently, frailty is prevalent in elderly patients, which are linked risks of adverse health outcomes; including poor life quality, hospitalisation, disability and mortality. Frailty is one of the most challenging consequences of an ageing population, although is not necessarily synonymous with getting older (Uchmanowicz et al, 2018).

In the UK, approximately 405,000 people, over 65 live in a care home. This includes 16% of the population who are over 85 (BGC, 2016). There are more than twice as many people living in care homes in England and Wales, than inpatients in hospitals (The National Institute of Research, 2018). However, research on frailty in care homes is lacking (Kojima, 2015), despite these residents being vulnerable and having multiple needs in terms of complex care and co-morbidities (Care Quality Commission 2012; Smith et al 2015; Healthwatch 2017). Frailty is characterised by increased vulnerability due to a decline in homeostatic reserve and secondary to dysregulation in multiple systems (Uchmanowicz et al, 2018).

Dutta (2015) found 50% of older people who are frail receive ineffective healthcare interventions. Robbins et al (2013) argues that neither GP nor care home staff have enough time to meet the complex needs of patients and that many staff lack prerequisite skills and training. As a consequence, those who live in care homes often have poorer access to healthcare and do not benefit from the range of services that can meet their complex needs (Robbins et al, 2013; Gordon et al, 2014).

Gordon, et al.’s (2014) found the health status of care home residents found they were frequent users of NHS resources, on average having contact once per month. The Health Foundation (2015) found care home residents have up to 50% more emergency admissions and Accident & Emergency (A&E) attendances than the general population aged 75 and over. Robbins et al (2013) argue primary care is not organised to deliver effective healthcare to meet the needs of care home residents, suggesting care is predominantly ad hoc and reactive. They suggest care is poorly placed to anticipate gradual or acute deterioration which facilitates proactive management. Consequently, NHS England has developed new care models for
frailty, recognising that good health, health care and social care are mutually dependent and need to be approached together (The National Institute of Research, 2018). The BGS (2012) argues hospital admissions may be reduced by increasing proactive care to those in care homes and recommends quality of care can be improved by nurses working as case managers:

‘Who could compensate for deficiencies in the scope of usual primary care. This could supplement general medical services and serve as a clinical and communication bridge to specialists and other community health services, thus improving resident outcomes and resource use.’

However, it is recognised that high standards of care delivery in care homes is dependent on many factors including skill mix, staff turnover, recruitment and retention and staffing levels (Royal College of Nursing, 2012; Allan and Vadean, 2017). Nevertheless, this is an opportunity for nurses undertake assessments and work in partnership with patients, carers, GP and the MDT to address the needs of frail patients in care homes, reducing the negative impact in terms of health outcomes and associated healthcare costs.

**Identification of People Living with Frailty**

Recognising frailty is important for nurses so that patients who live in care homes are cared for proactively. Up to 50% of those in care homes are considered frail (Kojima, 2015). Importantly, 40% are considered as pre-frail and could be targeted by interventions for frailty prevention or treatment. Uchmanowicz et al, (2018) argues nurses have a critical role in identifying older patients who may benefit from interventions aimed at reducing frailty, as well as preventing or delaying adverse outcomes.

Frailty in patients can be considered when three out of the five following indicators are recognised:

**Table 1. Frailty indicators**

If nurses identify these indicators, they should use this as the stimulus for a more comprehensive assessment and a mechanism to support others involved in the patients care to develop care plans and prioritise factors that can contribute to frailty.
To support assessment of frailty, nurses should use assessment tools. Turner (2014) argues the accuracy of tests for identifying frailty is uncertain. Furthermore, Sutton et al. (2016) identified 38 different assessment methods for frailty. Despite this, the BGS (2014) completed a literature review and recommends three assessment tools which are available to support nurses in identifying frailty.

Table 2. Assessment tools

Figure 1. PRISMA Questionnaire

Figure 2. Gait speed test

Care Planning

The complexity range of professionals which frail patients come into contact with often means that their care can be fragmented (Uchmanowicz et al, 2018). This is compounded by a gap between healthcare requirements and GP time; reactive or proactive healthcare; discord between healthcare philosophy and knowledge; and tensions in the responsibility for the healthcare of residents, staffing levels, skill mix and education (Robbins at al, 2015; Allan and Vadean, 2017). However, by using a holistic assessment, nurses are in an excellent position to act as care managers for frail patients and work in partnership, coordinating individualistic care. The National Institute for Clinical Excellence guideline (NG56) (NICE, 2018a) clinical assessment and management framework, provides guidance for caring with patients with complex co-morbidities. It is essential care home staff are involved in this process as they play a crucial, yet often unrecognised role in delivering healthcare to residents. Nurses can use this framework to support carers to implement care, or refer to others as appropriate, recognising that care home managers and staff are crucial to healthcare delivery, regardless of a perceived role in social care provision. Nurses can prioritise care based on interventions that may make the biggest impact when caring for frail patients. Patients with frailty benefit from a person-centred, comprehensive approach to care, which can reduce poor outcomes and may reduce hospital admissions (RCN, 2018).

Uchmanowicz et al, (2018) identified three areas which nurses can focus on including nutritional status, polypharmacy and exercise and physical activity.
Guyonnet et al (2015) suggest the clinical determinants of frailty correlate with the nutritional status in the elderly population, including low energy, psychomotor retardation, weakness, decreased physical activity, or weight loss. Patients in care homes are at high risk in regard to malnutrition due to several factors, including complex healthcare needs, disability, co-morbidities and polypharmacy (Uchmanowicz et al, 2018). Furthermore, intrinsic factors which include hormonal imbalance; specifically a reduced secretion of the ‘hunger hormone’ in the stomach, results in reduced appetite. Elderly patients experience loss of appetite which correlates to a decrease in physical activity, weight loss, and disability (Landi et al, 2010), which correlates with the clinical determinants of frailty (Uchmanowicz et al, 2018). In order to address nutritional status, all patients should be assessed using a validated nutritional screening assessment tool such as ‘Malnutrition Universal Screening Tool’ (MUST). However, Frank et al, (2015) argues that this is not always used in clinical practice. Regardless, NICE (2018b) guidelines support the use of MUST. Nurses can support those caring for frail patients in care homes to undertake nutritional assessments and plan individual interventions based on patient’s needs.

Figure 3 MUST assessment

The Royal College of Nursing (2019) make simple suggestions which are appropriate for patients and carers to adopt to support those who are having difficulty eating and drinking. Malnutrition in frailty is preventable or treatable with specific interventions including exercise, dietary supplements, vitamin D, and reduction of polypharmacy (Morley et al, 2013). Nurses can work with other using these steps to help adverse effects of malnutrition, which can impact frailty, are reduced.

Table 3 Supporting nutrition

**Polypharmacy**

Up to 50% of elderly patients are affected by polypharmacy and more than one in ten by severe polypharmacy (Wilson et al, 2011). Polypharmacy refers to four or more medications being prescribed. Severe polypharmacy is defined as the use of ten or more medications which includes the use of self-medication and of over-the-counter drugs (Zia et al, 2015). The UK Care Homes’ Use of Medicines Study (CHUMS) found care home residents take an average of eight medications each.
Appropriate medication regimes for older patients should be determined by age-related changes in pharmacokinetics and pharmacodynamics, including the number of concurrent medications, comorbidities and functional status (GPonline, 2018). An important distinction is to differentiate between those patients who are taking too many drugs (inappropriate polypharmacy) and those who have polypharmacy, which may be entirely appropriate. Another feature of polypharmacy is 'pharmacological cascade', which occurs when reactions to medication are viewed as a new clinical problem, which is often non-specific and difficult to diagnose (Zia et al, 2015). For example, there is a correlation between polypharmacy and falls. Falls are often associated with medications such as anti-hypertensives, diuretics, antidepressants and cardiovascular medications (Woolocott, 2009; Wilson et al, 2011).

Nurses can follow some basic principles for medication reviews and supporting concordance with medication regimes for patients in regard to frailty. Nurses can help coordinate medication reviews, simplifying dosage and medication regimes (Cowan, 2002; Uchmanowicz et al, 2018). Polypharmacy should be monitored by carers, nurses, and community pharmacists (Pulignano et al., 2010; Payne and Duerden 2015). The Royal Pharmaceutical Society (Chaplin 2016) and NICE (2019) suggest each resident should have a pharmacist-led medication review at least annually, any change in medication, or if residents move between care settings. Prescribers can be helped to make evidence-based decisions on ‘deprescribing’ specific medications, as part of a comprehensive medication review. The Screening Tool of Older People’s Prescriptions (STOPP) can potentially help stop inappropriate prescribing (O’Mahoney et al, 2015).

Those providing care should be especially involved as the administration of medications as this raises particular issues around dispensing, administration and monitoring of treatment, as well as staff training (Payne and Duerden 2015). One mechanism to support patients and carers in administration of medicine is by adopting a monitored dosage system (MDS). However, using MDS can lead to omissions as staff may be unable to identify which individual drugs within a single compartment may have been taken or if it is a liquid medication (Payne and Duerden, 2015). Nevertheless, nurses have a key role in supporting patients and carers by providing information in regard to medication administration, encouraging self-medication where appropriate and encourage care home routines what reduce

Exercise and cognitive function

Nurses who are caring for patients in residential or nursing homes need to consider the importance of exercise in regard to frailty and physical function.

‘Physical frailty is a medical syndrome with multiple causes and contributors that is characterised by diminished strength, endurance, and reduced physiologic function that increases an individual’s vulnerability for developing increased dependency and/or death’ (Morley et al, 2013).

Physical exercise programmes have a beneficial and effective impact on the health, and on physical and cognitive functioning of frail patients (Chodzko-Zajko et al, 2009). Trinidad (2012) found resistance training exercise led to improvements in muscle strength and functional performance, in regard to chronic diseases, sedentary habits, and functional disabilities for older people in institutions. Brett, et al (2017) found a physical therapist led activity intervention helped improve physical performance and reduced agitation in patients with dementia. Patients reported that exercise programmes improve their physical functions and mood, as well as opportunity of stimulating meetings with other people (Lindelof et al, 2017). Pereia, Rosado Cruz-Ferreria and Marmeleria (2018) found a ten week psychomotor-intervention, using cognitive and motor simulation, reversed the typical loss of cognitive and motor abilities in patients within nursing homes and that multimodal exercise programmes may help to maintain or improve functioning.

However, physical exercise should not be considered the exclusive domain of physiotherapists or occupational therapists; nurses and carers can work in partnership and play a core role in making physical exercise for patients an essential component of their of care. Xingjuan et al (2017) found home exercise programmes and behavioural support provided by trained nurses were effective at helping patients to remove barriers to engaging in exercise training. Although this study involved patients in their own homes, findings from the study are relevant for patients residing in care homes. Nurses can link with carers, occupational therapist and physiotherapists, private providers and voluntary sectors to develop integrated
exercise programmes addressing cognitive and psychomotor activity as a way to address and reduce the impact of frailty.

In conclusion, this article has focussed on patients with frailty in care homes and the important role nurses have in identifying and supporting these patients. The definition of frailty has been discussed within the context of being a patient in a care home. To support a nursing assessment of frailty, three assessment tools have been discussed which can support nurses to determine a diagnosis of frailty. From this assessment, nutrition, polypharmacy and exercise and cognitive function are explored as areas where the nurse can work in partnership with patients, carers and the wider MDT in order to support patients in reducing the impact of frailty and improving health outcomes.

Table 4 Further resources

References


Studenski et al, (2011) Gait Speed and Survival in Older Adults *JAMA.* January 5; 305(1). Pp.50–58


The Health Foundation (2015) Focus on: Hospital Admissions from Care Homes. https://www.health.org.uk/sites/default/files/QualityWatch_FocusOnHospitalAdmissionsFromCareHomes.pdf (Accessed 20.11.18)


Figure 1 PRISMA-7 Questionnaire

<table>
<thead>
<tr>
<th>Patient Questions</th>
<th>Yes ☐</th>
<th>No ☐</th>
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<tbody>
<tr>
<td>1. Are you older than 85 years?</td>
<td></td>
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<td>2. Are you male?</td>
<td></td>
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<tr>
<td>3. In general, do you have any health problems that require you to limit your activities?</td>
<td>Yes ☐</td>
<td>No ☐</td>
</tr>
<tr>
<td>4. Do you need someone to help you on a regular basis?</td>
<td></td>
<td></td>
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<tr>
<td>5. In general, do you have any health problems that require you to stay at home?</td>
<td>Yes ☐</td>
<td>No ☐</td>
</tr>
<tr>
<td>6. If you need help, can you count on someone close to you?</td>
<td></td>
<td></td>
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<tr>
<td>7. Do you regularly use a stick, walker or wheelchair to move about?</td>
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Total checked: _____  _____

**Instructions:**
- For questions 3 through 7, do not interpret the answer; simply note the person’s answer without considering whether or not it should be “yes” or “no”.
- If the respondent hesitates between “yes” and “no”, ask him/her to choose one of the two answers.
- If, despite several attempts, he/she persists in answering “a little” or “at times”, enter “yes”.

**SCORING:** If the respondent had 3 or more “yes” answers, this indicates an increased risk of frailty and the need for further clinical review.
Figure 2 Gait speed test

Gait speed test

Average gait speed of longer than 5 seconds to walk 4 metres is an indication of frailty. The test can be performed with any patient able to walk 4 metres using the guidelines below.

1. Accompany the patient to the designated area, which should be well-lit, unobstructed, and contain clearly indicated markings at 0 and 4 metres.
2. Position the patient with his/her feet behind and just touching the 0-metre start line.
3. Instruct the patient to “Walk at your comfortable pace” until a few steps past the 4-metre mark (the patient should not start to slow down before the 4-metre mark).
4. Begin each trial on the word “Go”.
5. Start the timer with the first footfall after the 0-metre line.
6. Stop the timer with the first footfall after the 4-metre line.
7. Repeat three times, allowing sufficient time for recuperation between trials.

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Figure 3 MUST Assessment

‘MUST’ Tool

**Step 1**
BMI kg/m² Score
>20 (>30 Obese) = 0
18.5—20 = 1
<13.5 = 2

**Step 2**
Unplanned weight loss in past 3.6 months % Score
<5 = 0
5-10 = 1

**Step 3**
If patient is acutely ill and there has been or is likely to be no nutritional intake for >5 days Score 2

**Step 4**
Overall risk of malnutrition
Add scores together to calculate overall risk of malnutrition
Score 0 Low Risk
Score 1 Medium Risk
Score 2 or more High Risk

**0 Low Risk**
Routine clinical care
- Ensure appropriate food and drink choices
- Repeat screening every 3-6 months, unless there is clinical concern
- Document action taken

**1 Medium Risk**
Observe
- Follow ‘MUST’ 1 care pathway on page 10 of Guidelines Booklet

**2 or more High Risk**
Treat*
- Follow action plan for medium risk
- Refer to Dietitian*
- Re-weigh weekly
- Document action taken
*unless detrimental or no benefit is expected from nutritional support e.g. end of life care pathway

This tool is to assist your assessment. If in doubt, use your professional judgement.
### Table 1 Frailty indicators

1. Falls (collapse, legs give way, found on the floor)
2. Immobility (sudden change in mobility, 'off legs')
3. Delirium (acute confusion or being 'muddled')
4. Incontinence (a change in continence or worsening of incontinence)
5. Susceptibility to side effects of medications (e.g. confusion with codeine, hypotension with antidepressants) (BGS, 2014 Royal College of Nursing, (RCN), 2018).
### Table 2 Assessment tools

1. **PRISMA-7 Questionnaire.** This is a seven item questionnaire which is used to identify disability. A score of over three is considered to identify frailty.  
   Figure 1 - PRISMA-7 Questionnaire

2. **Walking speed (gait speed).** Gait speed is usually measured in m/s and has been recorded over distances ranging from 2.4m to 6m in research studies.  
   Figure 2 – Gait speed test.

3. **Timed up and go test (TUGT).** The TUGT measures, in seconds, the time taken to stand up from a standard chair, walk a distance of three metres, turn, walk back to the chair and sit down. The longer this test takes, is an indication of frailty.
Table 3 Supporting nutrition

- The person has the opportunity to use the toilet and wash his or her hands before eating.
- Their mouth is clean and moist.
- The person is sitting comfortably and the immediate environment is clear of mess, clutter and, if possible, noise.
- The area is well lit, the person has their glasses on (if used) and dentures are in place.
- The food is presented attractively, not in huge portions, and is arranged and cut to enable the person to eat it easily.
- A glass of water or preferred drink is easy to hand.
- The person is offered gentle encouragement and praise as they progress through the meal.
- There is a record of what the person has eaten and drunk on the appropriate charts; any concerns about an apparent change in the person’s appetite and food/fluid intake or ability to chew and swallow, is reported immediately to the manager or supervisor.
Table 4 Further resources

- National Voices narrative for coordinated support for older people
- Age UK and the British Geriatric Society research on the language and perceptions of frailty
- NHS England toolkit for general practice in supporting older people living with frailty
- NICE information relevant to frailty
- NHS RightCare resource comparing a sub-optimal, but typical, frailty pathway with an ideal frailty pathway
- National Institute of Health Research on older patients living in hospital with frailty
- National Institute of Health Research summary of reliable evidence about the effects of important interventions for practitioners and decision makers
- British Geriatric Society Comprehensive Geriatric Assessment (CGA) toolkit for general practitioners and medical and healthcare professionals working in primary care settings