Recognising and managing frailty in primary care

- Frailty is a distinct health state where a minor event can trigger major changes in health from which the patient may fail to return to their previous level of health.

- Simple tests with high sensitivity for frailty are gait speed, the timed up-and-go test and the PRISMA 7 questionnaire.

- Comprehensive geriatric assessment is essential in the management of moderate to severe frailty.

- Exercise programmes, particularly high intensity interventions, may improve gait, balance and strength and have positive effects on fitness.

- Supported self-management can improve health outcomes. However, the value of case management has still to be proven.
**Background**

Frailty is a distinct health state related to reduced function across multiple physiological systems that develops as part of the ageing process. Frailty means that even minor events can trigger disproportionate changes in health status after which the patient fails to recover to their previous level of health. Frailty is a spectrum condition from mild to severe frailty.

Active management of older people with frailty through the provision of preventative and individualised care can help avoid crisis events. It is therefore important to recognise frailty independently of long term conditions and disability, and manage it as such.

It is thought that 10% of people aged over 65 have frailty, and 25 to 50% of those aged over 85. This issue of Effectiveness Matters summarises guidance and evidence about recognising and managing frailty in primary care. The bulletin is based on national guidance and existing sources of synthesised and quality-assessed evidence.

**Recognising and diagnosing frailty**

A review of simple tools to identify frailty in older people in the community found the following diagnostic tests:

- Gait speed
- Timed up-and-go test (TUGT)
- PRISMA 7 tool
- Clinical judgment
- Polypharmacy
- Groningen Frailty Indicator (GFI)
- Self-rated health

Gait speed, ≤0.8 meters per second (taking more than 5s to walk 4m); the PRISMA 7 questionnaire; and a TUGT time of >10s, showed high sensitivities for identifying frailty. However moderate specificities mean that false positive results are likely. Use of a high sensitivity test in combination with another may improve accuracy. Use of these tools in older populations with higher baseline prevalence of frailty is likely to improve test accuracy. The other tests were noticeably less accurate. These results were used in the British Geriatrics Society (BGS) ‘Fit for Frailty’ guideline, which recommends that older people should be assessed for frailty at all healthcare encounters using gait speed, the TUGT or the PRISMA questionnaire. When frailty is identified, it should be recorded using Read codes (mild frailty 2Jd0; moderate frailty 2Jd1; severe frailty 2Jd2).

There is good quality evidence that physical frailty indicators are predictors of activities of daily living (ADL) disability in people aged 65 years and older living in the community. Slow gait speed and low physical activity/exercise were the most powerful predictors followed by weight loss, reduced lower extremity function, poor balance and low muscle strength. Monitoring these indicators may be useful for identifying elderly people who could benefit from an intervention to prevent ADL disability. However there is no evidence of validated tools for prediction in primary care.

**Managing frailty**

**Comprehensive geriatric assessment**

Comprehensive geriatric assessment (CGA), the gold standard for the care of people with moderate to severe frailty, involves specialist, organised and co-ordinated geriatric care by a dedicated team. Individualised, multifaceted and multidisciplinary assessments, interventions and case management seem to be effective elements of CGA.

A review of community-based complex interventions that included CGA, found a statistically significant reduction in both hospital and nursing home admissions in an older population with frailty. A well conducted Cochrane review found that geriatrician-led CGA delivered on specialist elderly care wards provided significant improvements in the chances of a patient being alive and in their own home at up to a year after an emergency hospital admission than if the patient received care on general medical wards.

Outpatient and community-based multidisciplinary assessment and management interventions reduced emergency department visits while hospital-based interventions appeared to have little effect. However, the hospital based interventions were generally much shorter than outpatient/community interventions, and it may have been more difficult for hospital based programmes to link patients with appropriate community care.

Individualised shared care and support plans (CSP), developed as part of a CGA, should include: the coordinating carer (likely to be GP), a health and social care summary, and plans for optimisation and/or maintenance; escalation; urgent care; and advance care or end of life care.

A review of early discharge planning compared to usual care in acutely ill or injured older adults found the risk of hospital readmission was reduced by 22% with early discharge planning, and length of stay on readmission was reduced by more than two days.

**Exercise**

There are several reviews of multicomponent exercise interventions for older people with frailty. Exercise programmes differ in their content, setting (facility/home), delivery (individual/group), duration and frequency which make it difficult to quantify the effect of exercise and draw clear conclusions about the most effective.
characteristics of a programme. Exercise improves gait speed but has no consistent effect on balance, ADL, functional mobility or quality of life. There is considerable uncertainty regarding effects on outcomes including quality of life and long-term care admission.

Multicomponent approaches, providing strength, endurance and balance training could be a useful strategy for improving gait, balance and strength. Resistance, functional and balance training also appear to have significant positive effects on physical fitness outcomes, ADL and quality of life in older people with frailty living in care homes. Such interventions delivered over 5 months or more, performed three times per week, for 30–45 minutes per session, generally had the most positive impact on frail older adults. High intensity interventions seem to be more effective than low intensity interventions; for frail older people unable to undertake high intensity exercise, a review of chair-based exercise found limited evidence of benefit in mobility and function, cardiorespiratory fitness, and mental health.

Programmes should be well designed, conducted and monitored by well-trained physiotherapists and physical activity specialists. Frail older people may need functional-based programmes with shorter duration sessions compared with healthy older adults. Programmes linked to community facilities could offer advantages over home-based programmes, but costs, difficulties in transport, comfort, and user preferences need to be considered. There is preliminary evidence that home-based exercise interventions may improve disability in older people with moderate, but not severe, frailty.

A review of mobility training specifically in frail older people living in the community is underway.

Medication review
The BGS guidelines recommend GPs review medicines as part of a holistic medical review of older people with frailty. Factors to consider in a medicines review include: drugs associated with adverse outcomes in frailty may still be needed and safe with careful monitoring; consider dosages as the metabolism changes with age; national guidelines for single long term conditions should be interpreted on an individualised basis; checklists such as the Screening Tool of Older Person’s Prescriptions and Screening Tool to Alert doctors to Right Treatment (STOPP/START) may help meet the person’s desired long term outcomes.

NICE recommend that GPs work with multidisciplinary teams to ensure that residents in care homes have a medication review at least once a year. Roles and responsibilities should be assigned and appropriate training should be given to team members. The resident and/or family member/carer should be involved and details of the frequency and outcomes of reviews documented in the residents care plan.

Supported self-management
There is evidence of effect from supported self-management in long term conditions in older people, though not specifically in frailty. A descriptive review of reviews suggests supported self-management: increases a person’s knowledge about their condition and how to self-care; improves confidence and coping ability; and improves health behaviours, including appropriate use of healthcare. This results in an overall improved experience of care.

Self-management by an educational process that is integrated into routine care with the active involvement and support of health professionals is the most effective approach. Educational materials such as booklets, leaflets and DVDs can be effective. Supported self-management may improve health outcomes, reduce hospital admission rates and be cost-effective.

Case management
The findings were mixed and there is no clear evidence of effect on service outcomes and a general lack of information about patient outcomes.

A well conducted review of case management initiated in hospital and in the community, found variations in the duration of case management, frequency of home visits, number of multi-disciplinary meetings and the health professionals who coordinated the case management. Overall case management had no impact on unplanned admissions. Hospital initiated case management may reduce hospital stay and possibly increase the time to first readmission. One study found that community initiated case management reduced emergency department visits.

### Key actions for the recognition and management of frailty in primary care

- Assess older people for frailty during all healthcare encounters
- Record frailty, and frailty severity, using Read codes
- In people with moderate or severe frailty, carry out a comprehensive geriatric assessment to:
  - Diagnose medical illnesses and optimise treatment
  - Conduct a medication review
  - Generate a personalised shared care and support plan
- Refer for specialist assistance in complex or uncertain diagnoses
- Share health record information between primary care, emergency services, secondary care and social services.
- In people with very severe frailty, offer Advance Care Planning
A review of nurse home visiting concluded that multiple visits, geriatric training and experience, interdisciplinary collaboration, multidimensional assessment, and use of theoretical frameworks could benefit older adults with frailty.  

A review of patient advocacy case management, a multidisciplinary approach to continuing care viewed from a patient perspective, concluded that case management did not increase service use or costs, and it may even reduce service use.  

The case for continued investment in community matrons remains to be proven. A well conducted multi-site study found that case management of frail elderly people introduced additional services without reducing hospital admissions: possibly because the community matrons identified more cases.  

What is not clear from the evidence is use of case management tools for the selection of patients for case management, or where case management could be best targeted.  

Advance care planning  

The majority of older individuals would like the opportunity to discuss their end-of-life care but currently only a few have this opportunity. Both the public and the health care professionals saw it as the doctor’s responsibility to initiate discussions. Time pressures and the absence of a clear diagnosis to trigger advance care planning discussions are seen as the major obstacles.

References