Frailty on the acute medical unit

The number of patients aged 65 years and over admitted to emergency departments is increasing rapidly and this population is also at high risk of hospital admission following an emergency department attendance. In 2015, patients aged over 65 years old made up over 23% of the total attendance at emergency departments across the UK, of whom 47% were admitted (Hospital Episode Statistics, 2015).

Older patients are at increased risk of poor outcomes such as inpatient mortality, and intensive health and social service use post-admission (Buurman et al, 2011). These outcomes depend both on the severity of the acute illness (intensity of the stressor) and the patient's underlying vulnerability towards adverse outcomes (frailty) (Romero-Ortuno et al, 2016).

In the 2015–16 NHS benchmarking report on urgent care for older people, just over half (52%) of hospitals offered some form of specific frailty care to older people in the first 72 hours of their stay (NHS Benchmarking Network, 2017). Older patients with frailty are likely to have atypical and potentially misleading symptoms (Limpawattana et al, 2016), as well as multiple comorbidities. This leads to variability in the quality of care provided in acute settings and possibly has an impact on the high rates of admission of this age group following emergency department attendance.

Acute medical units are key to improving urgent care for older people with complex needs, as they offer a favourable environment, conducive to a more standardized approach to the management of acute frailty, and help reduce variation.

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The acute medical unit

Older patients with frailty are highly prevalent in acute medical units; 29% of patients over 70 years of age were classified as moderately to severely frail (Conroy and Dowsing, 2013). Because of complex needs and a high incidence of comorbidities, these patients tend to have poor outcomes when discharged from acute medical units (Edmans et al, 2013). Half of frail older people discharged home within 72 hours are readmitted and one-third die within 1 year (Woodard et al, 2010). The complexity of assessment often leads to admission as a default option, but acute medical units should not be considered merely as a transition point for older patients 'waiting for geriatric base ward admission'. Rather, they represent an excellent setting for delivering efficient holistic care to older people and prevent complications related to unnecessarily prolonged hospital stays (Soong et al, 2016).

The Royal College of Physicians (2007) emphasizes that acute medical units should 'tailor their operations to meet the needs and expectations of an ageing population with more complex illness'. This could be done by focusing resources and efforts on acute medical units to embed processes and competencies relevant to the needs of older people. One response has been to develop 'acute frailty units'. These units usually include physicians and nurses, along with physical therapists, social workers and occupational therapists, who meet regularly to plan patient care (Fox et al, 2012).

Supplementary efforts should also be made to improve transitional care 'at the interface' for patients being discharged home from an acute medical unit. Indeed, the hospital-to-home transition is a critical period that requires careful communication and coordination with community teams to allow the planned actions to take place effectively.

Geriatricians only make up 3.3% of the total consultant workforce in hospitals (NHS Benchmarking Network, 2017). Considering the demographics and the average age of the in-hospital population, it is critical that all professionals improve their skills in the management of frail older people. This is well recognized, and geriatric medicine now forms an increasing part of the teaching of medical trainees in acute care (Gordon et al, 2014).

Finally, the acute medical unit is a time-sensitive area, because of pressure on flow, which can also impact on the attitude of staff towards older patients. However, rapid assessment alone does not improve flow. Rather, investing time and resources in the acute medical unit to make the assessment more accurate, holistic and patient centred will improve outcomes and also help to improve flow.

Identifying frailty

In a pragmatic way, the issue is to be able to identify patients who are most at risk of adverse outcomes after admission, and might benefit from a more personalized and holistic approach to care (Soong et al, 2016). Of note, these patients may not necessarily be aged, as frailty features may sometimes occur in younger adults and will require the same management principles, but the prevalence and the importance of the risk in terms of harms and service use in the older population justify a systematic case-finding approach.

Frailty can be defined as a state of increased vulnerability to adverse outcomes when exposed to a stressor event (Clegg et al, 2013). Frail older patients can have multi-faceted presentations, which can be clinically recognized in the form of 'frailty syndromes', such as falls, delirium and cognitive impairment, incontinence, functional disability or social vulnerability (Clegg et al, 2013).

In busy care settings, frailty identification tools should be rapid and easy to use (Soong et al, 2016). Different clinical frailty

identification tools have been developed for acute care, most of which are of limited use on their own for risk stratifying patients, although they perform better than age alone or a subjective evaluation (Conroy and Dowsing, 2013; Edmans et al, 2013; Wou et al, 2013). Although no tool currently outperforms others for risk-stratifying patients, it is critical to search for consistency across settings to help effective communication between professionals and reduce variation.

Rockwood et al (2005) have validated a clinical frailty scale, which is the most recognized and widely used tool across the UK. It is based on clinical judgement and uses pictograms to assign a frailty level from 1 (very fit) to 9 (terminally ill, life expectancy <6 months)(*Figure 1*). This tool is easy to use by any professional involved in care for older patients in acute settings (Elliott et al, 2017). It may also help predict inpatient mortality and target the need for comprehensive geriatric assessment (Wallis et al, 2015).

Ambulance services records provide useful information for completing most tools, so the emergency department or acute medical unit nurse receiving handover from them will be able to populate a 'frailty box' on the entry proforma, which may also be added to electronic hospital records. The final step will be to check that frailty identification effectively leads to an action (i.e. triggers a process such as comprehensive geriatric assessment) in a 'plan-do-check-act' cycle. (Conroy et al, 2016).

Figure 1. The clinical frailty scale (Rockwood et al, 2005).

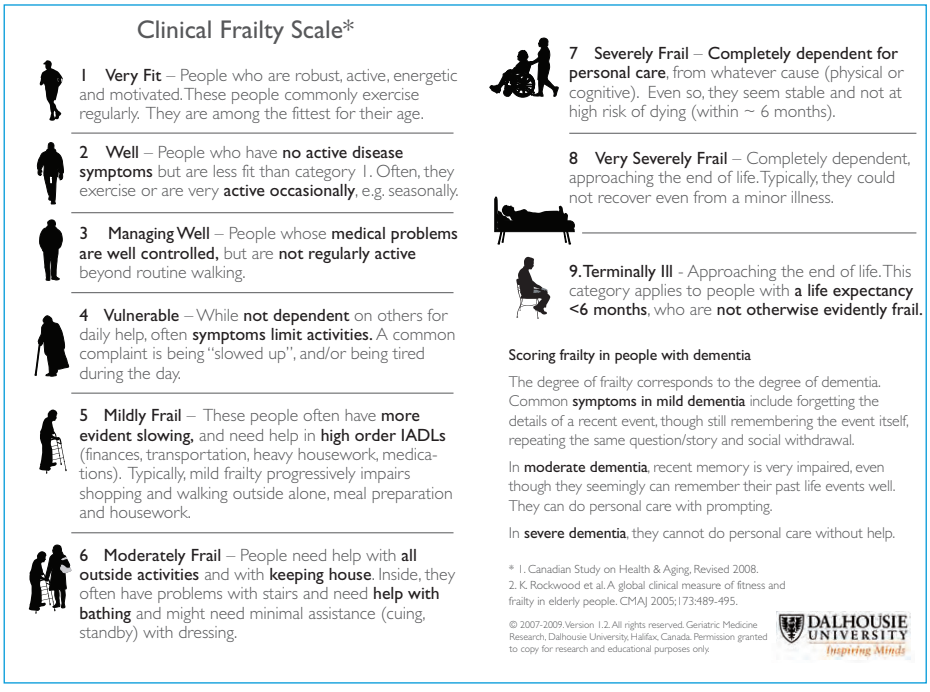
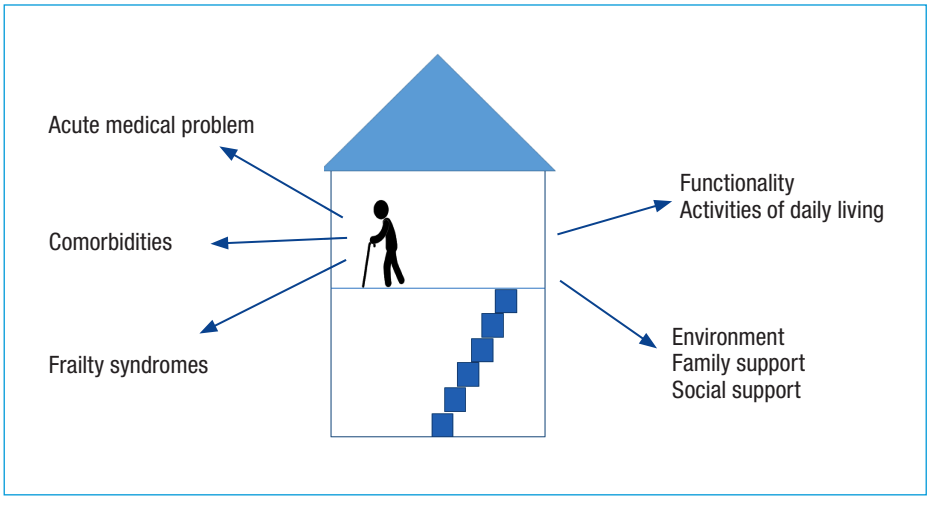


Figure 2. Comprehensive geriatric assessment: the patient in his/her environment.



Managing frail older patients

The Silver Book (Banerjee et al, 2012) and the Royal College of Physicians' (2012) acute care toolkit provide guidelines for the management of older people in acute care.

Comprehensive geriatric assessment

While the predominant model of care in urgent care tends to be focussed on solving an acute medical problem, frail older people have complex needs that require clinicians to 'look at the bigger picture' and consider the patient as a whole, in his or her usual environment (*Figure 2*).

Comprehensive geriatric assessment is defined as a 'multi-dimensional, inter-disciplinary diagnostic process to determine the medical, psychological, and functional capabilities of an older person in order to develop a coordinated and integrated plan for treatment and follow-up' (Rubenstein and Rubenstein, 1991). Comprehensive geriatric assessment assesses medical issues (acute condition and comorbidities), functional status, environment and social support network.

Comprehensive geriatric assessment is more effective than usual care for improving outcomes of older people admitted to hospital (Ellis et al, 2011). This includes mortality, functionality, quality of life, institutionalisation, cognition, length of stay and costs. There is strong evidence that comprehensive geriatric assessment is effective in improving patient outcomes in the acute care context (Ellis et al, 2011; Fox et al, 2012). This is also supported by a quality improvement programme in the UK (Silvester et al, 2014) and is recommended in national guidance (Banerjee et al, 2012; Royal College of Physicians, 2012).

Identifying 'frailty syndromes'

Awareness of frailty syndromes and the atypical presentations of medical conditions in frail older people is of paramount importance (Limpawattana et al, 2016). *Table 1* illustrates the domains which should be covered during comprehensive geriatric assessment and examples of specific competencies required.

Interdisciplinary coordination

The evidence to support comprehensive geriatric assessment is stronger for trials of wards designated for comprehensive geriatric assessment than for trials evaluating other approaches such as in-reach or liaison services (Ellis et al, 2011). This implies that interdisciplinary coordination is key to the success of the process.

Interdisciplinarity requires team work, and important efforts of communication and coordination, both in and outside hospital. Scheduled multidisciplinary team meetings are essential for agreeing a management plan as well as defining who will deliver the actions, and by when. Communication to the GP and community services as well as follow-up of actions is also essential and should lead to possible adaptations of the management plan in a dynamic process (*Figure 3*). Therefore, it is important that staffing levels in the acute medical unit are sufficient to allow this multiprofessional partnership.

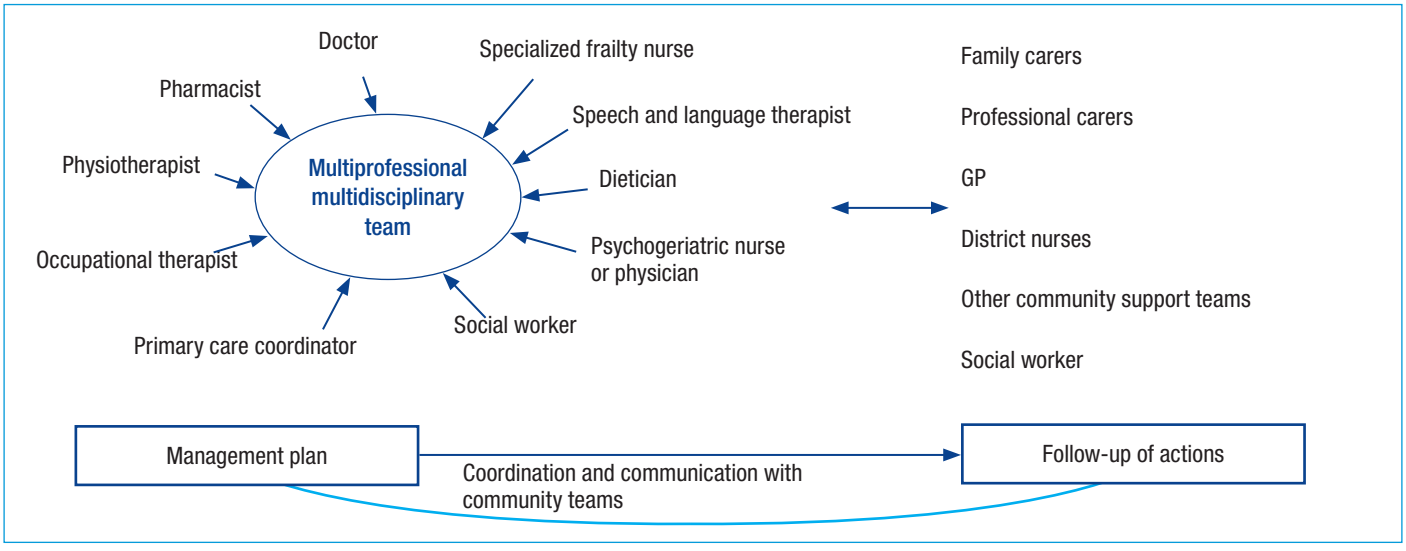
Discharge planning

Guidelines emphasize the importance of early discharge planning (Banerjee et al, 2012).

Table 1. Medical assessment of frail older people

Frailty syndromes	Key issues
Cognition	Recognizing (risk of) delirium Collateral history is key to detect recent change in cognition. Diagnosis relies on the four core criteria of the confusion assessment method (Inouye et al, 1990): rapid onset or worsening with fluctuating course, inattention, disorganized speech and alteration of level of consciousness (hypo- or hyper-activity). Avoid overuse of psychotropic drugs and restraints Screening for dementia and organizing follow up Capacity assessment: can the patient decide?
Mood	Masked depression can present as confusion or irritability
Nutrition and hydration	Weight loss, undernutrition, swallowing (also risk of aspiration), risk of dehydration
Falls, functionality and mobility	Falls and 'off-legs' sometimes only symptom of many acute conditions. Recognize context of multiple falls. Assess risk of major trauma (osteoporosis, anticoagulants, isolation and immobility), screen for reversible causes (especially medications). Rehabilitation, adapting level of care to needs, adapting environment (e.g. frame, bars at home, commode)
Continence	Risk of retention and faecal impaction, reduce overuse and over-reliance in urine dips for diagnosis of urinary tract infection, reduce unnecessary catheterization, new onset incontinence can reveal urinary tract infection, improving symptoms and quality of life
Polypharmacy	Medicine reconciliation to reduce risk of iatrogenic complications, reduce psychotropic drugs, question risk–benefit balance of treatments. Tools such as STOPP-START (Gallagher et al, 2008) or polypharmacy smartphone App (NHS Scotland) may be useful
Skin integrity	Evaluation of skin condition is especially important in patients with limited mobility
Sensory loss	Hearing or visual impairment affects strongly affects communication, activities of daily living and risk of confusion
Pain	Older patients are often undertreated for pain. Withdrawn or confused patients could be in pain
End of life care	Advanced care planning should be considered depending upon prognosis (ascertained using the Clinical Frailty Score) (i.e. resuscitation decisions, ceiling of care, preferred place of death). The patient should be involved with decisions

Figure 3. Who might be involved? Interdisciplinarity and coordination.



Older people should only be discharged from hospital with adequate support and with respect for their preferences. However, the estimated date of discharge should be anticipated early, in order to mobilize all professionals on the common objective of a prompt but 'successful' discharge, in which maximum efforts are made to avoid re-admission and minimize the risk of poor outcomes (Banerjee et al, 2012). This can include the intensity of the package of care needed at home, adaptations to the environment or funding issues. It is also important that the patient and family are involved in all the decisions. Where possible, detailed patient-centred discharge instructions should be presented and explained to the patient.

Conclusions

Despite clear evidence that early assertive care can make a difference, there remain gaps across the UK with regards to the acute management of frail older people. Although comprehensive geriatric assessment is often thought to be a complex process, it can be operationalized effectively with standard procedures and multiprofessional coordination. In urgent care settings, time pressures make it difficult to embed fully integrated comprehensive geriatric assessment, but the initial assessment process can start, bringing benefits further on in the patient journey (at home or in hospital). Future directions for making the general medical workforce more 'frailty-ready' would include embedding frailty teaching from undergraduate through to postgraduate levels, mandatory assessments (e.g. at final and professional exams), and training for established staff such as consultants. **BJHM**

Figure 1 *was adapted from the 7-point scale used in the Canadian Study of Health and Aging (Rockwood et al, 2005) and has been reprinted with permission of Geriatric Medicine Research, Dalhousie University, Halifax, Nova Scotia.*

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KEY POINTS

- More and more older patients with frailty are admitted to urgent care settings.
- Acute medical units are a key cross-point of care for older patients with frailty and should be the priority target for improvement.
- Frail older people have complex needs which cannot be met by focussing only on the acute medical problem.
- There is clear evidence that a holistic approach in the form of comprehensive geriatric assessment can improve patient outcomes.
- This requires multi-domain and interdisciplinary assessment, coordination, communication and follow up of actions.

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