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ESSENTIALS Older people, especially those with frailty, are increasingly becoming the main users of urgent care services, despite efforts to promote care at home; this is a global issue. Older people with frailty will usually present with nonspecific presentations, multiple morbidities, functional decline, and differential challenge (those most in need are least able to access the services they require): a constellation that challenges the traditional paradigm of urgent care responses. Comprehensive geriatric assessment is a useful evidence-based, overarching framework to guide assessment and management of older people with frailty presenting with crises. Geriatric teams should be excellent at delivering comprehensive geriatric assessment, but all clinicians throughout the health and social care system need to be able to apply its principles. For older people with frailty, patient/family-derived, value-driven goals of care are more important than protocol-driven standards of care. Effective management of older people presenting with frailty syndromes requires a specific set of competencies that can be taught and learnt, but changing clinicians' routine behaviours can be difficult. Rapid comprehensive geriatric assessment in urgent care settings, supported by robust early supported discharge services, can improve outcomes for patients and for services. The clinical response needs to be supported by a systems-based approach that integrates governance, information and risk sharing, underpinned by stable leadership and a shared common vision. Introduction A general overview of acute hospital care for older people is provided in Chapter 6.5. This chapter will focus specifically upon care for older people in emergency departments and acute medical units (AMUs) (i.e. the first 72 hours of a hospital stay), and the interface with community services. This chapter contains a combination of theory and evidence, supported by clinical vignettes. These have been condensed in the sections on developing a framework and on 'bringing it all together' that focus upon clinical issues. The epidemiology of crises in older people Urgent care is increasingly synonymous with older peoples' care in Organisation for Economic Co-operation and Development (OECD) countries, especially in Europe, which has 23 of 25 of the world's 'oldest' countries. Many countries in Asia are catching up on the ageing demographic, especially in the Far East. The United Nations uses a cut-off of age of over 60 years to define 'old', but being older varies according to country; for example in sub-Saharan Africa, the World Health Organization (WHO) suggests the age of 50–55 be considered old.

Although this ageing of the hospital population is the case for the United Kingdom (UK), it has a lower rate than most OECD countries, at 87% of the average. But admission rates are increasing significantly. Over the 11-year period from 2001/02 to 2012/13, there was a rise of 26% per 1000 older people. Rates increased steadily with age, just 10% for the 65–69 age group but 50% for the 90 plus age group. In contrast, the total number of bed days following emergency admissions of people aged 65 plus has fallen as a result of reduced length of hospital stays. At least in the United Kingdom, there has been considerable debate about these changes. Increased numbers of older people alone does not explain it as there has also been a rise in the age-standardized rates of admission. There is no simple explanation. The reality is likely a combination of the old population being older, with the associated greater morbidity requiring acute care, but also difficulties in coordinating care for these individuals in community settings. Re-admission may be common, up to 50% at one year. Policy responses In response to clinical and economic concerns about these rises, in many well-developed health services internationally there has been a considerable emphasis on identifying the top ‘high resource users’, with a view to providing a ‘wrap-around’ care solution that, in theory at least, should decrease reliance upon acute hospital based (secondary care) services. Trials of hospital at home have demonstrated at least equivalent outcomes for older people with crises managed in their own homes as opposed to acute hospitals, but for a relatively small population, with careful case selection.

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540 Section 6 Old age medicine Attempts to upscale the findings from the ‘hospital at home’ trials, in the United Kingdom conceptualized as ‘intermediate care’, have thus far failed to have the desired impact on attenuating acute care use. Perhaps in recognition that the focus on a small number of users in an attempt to reduce the overall burden on acute care has had a limited impact, there has been a move towards ‘proactive care’, again providing holistic assessment and management but in this case focusing upon a broader population, identified on the basis of predicted hospital resource use in the years to follow, rather than incident resource use. The challenges for such schemes, for which robust evidence remains scarce, is upskilling a much broader group of community providers in the management of older people. This will be a significant challenge as the relevant competencies have not been widely promulgated in undergraduate and postgraduate curricula. Additional limitations come from the relative inability of a range of risk prediction tools to identify the population most likely to experience an admission (and hence a population in whom genuine admission prevention might be possible), and at the same time avoid excessive inclusion of those not likely to experience an admission, for whom admission prevention interventions might confer benefit in terms of quality of care, but risk being not cost-effective. The justification of the focus on hospitalization use as the main driver of resource use is supported by studies identifying that the bulk of costs in an individual’s care episode over the three months following an acute admission is primarily driven by subsequent hospital use, as opposed to community costs. There is therefore a gap in community capability, in terms of identification, competence, and capacity, in the face of the volumes of older people presenting to services which aim to prevent or respond to crises. The implication is that many older people with frailty will continue to access urgent care hospitals, which therefore need to be fully equipped and capable of providing appropriate age-attuned care. In most developed health services, urgent care starts in the emergency department (ED) or acute medical units, hereafter referred collectively to as urgent care settings. However, we need to be aware that currently both admission prevention and admission avoidance approaches are based around a healthcare-delivery paradigm rather than an

improvement in health paradigm. Health, in this context as per the WHO definition of a state of physical, mental, and social well-being, and not just an absence of disease or infirmity. Evidence-based interventions for older people with frailty in urgent care settings All too often hospitals are designed to meet the needs of individuals with specific conditions, rather than provide holistic care which has been shown to be effective for older people. Unfortunately, there is a limited evidence base to guide service configuration specifically in urgent care settings. Recent reviews focusing upon trials of transitional care models to support frail older people being discharged from emergency departments found no overall impact. So the response is to extrapolate from the existing evidence for comprehensive geriatric assessment (CGA), and apply it in new settings, ideally accompanied by robust service evaluations. This quality improvement approach has evidenced apparent improvements in service level outcome for older people with frailty in urgent care settings in several UK centres; evidence for improved person-related outcomes from such initiatives have yet to be demonstrated. The key role of frailty Hospitalization of an older person can be a sentinel event that heralds an intensive period of health and social care service use. This is especially the case for 'older people with frailty' (see Chapter 6.2), a distinctive late-life health state in which apparently minor stressor events are associated with adverse health outcomes. Depending upon definitions, the setting, and local service configuration, about 5–10% of all emergency department attendees and about 30% of patients in acute medical units are older people with frailty. Although they therefore constitute a minority of the total patients in urgent care settings, they represent a much larger proportion of those at risk of harms and high resource use as they progress from admission into inpatient care. Early identification of frailty is important to maximize the opportunities for reducing harm and optimizing care. Frailty scales exist, but there is limited evidence for their discriminant ability in the urgent care context: although most perform better than chance in predicting a range of poor outcomes, none of them performed adequately for individual clinical decision-making, and most perform either poorly or very poorly. When defining a population for intervention in clinical practice, acceptability, and ease of use are important considerations as well as discriminant ability. Perhaps the most practical tool for urgent care settings is the Clinical Frailty Scale (CFS), which is quick simple and easy to use. People with CFS scores of 6–9 are at the greatest risk of harms (delirium, death) as well as longer lengths of stay. Pathways Early identification of frail older people at urgent presentation enables targeting for care approaches that can deliver comprehensive geriatric assessment, which is an effective, evidence-based approach to improve patient outcomes and service efficiency. The aim is to provide specialist care to those most in need, but this is rarely possible for all patients, and in some health services specialist old age services do not exist. There is need, therefore, to upskill general acute care through guidance and pathways that operate at any time of the 24-hour cycle. Although service structure is less important than what is done, there is a stronger evidence for the effectiveness of dedicated specialist units such acute geriatric units (acute frailty units) than for liaison type services. Treating 13 frail older people using comprehensive geriatric assessment avoids one unnecessary death or admission to residential care at six months, compared with general medical care

6.4 Older people and urgent care 541 for an urgent care episode. To put this in perspective, we need to thrombolysed 17 people with acute ischaemic strokes to avoid one 'unfavourable' outcome at the same time as causing 1 death for every 100 treated and one nonfatal bleed for every 20 treated. A typical frailty (comprehensive geriatric assessment) service will consist of:

- A physician with expertise in the care of frail older people— usually, but not exclusively, a geriatrician •

Physiotherapists and/or occupational therapists • Nurse specialists that can offer a case management function • Ward and peripatetic teams with skills and expertise in frailty • Staff able to organize complex (and simple) discharge

Comprehensive geriatric assessment is a process: Who does it? Do you need a geriatrician to do comprehensive geriatric assessment, or just apply geriatric competencies well? The only logical answer is that it is the application of the competencies that is key, not who applies them. To quote Coni, 'Geriatrics is too important to be left to geriatricians. We are all geriatricians now, and geriatric medicine should be like a caretaker government—self-appointed to instruct others how to do it, and then to preside over its own demise'. But at the heart of this is the difference between knowing and doing: knowledge and skills in managing older people with frailty can be taught, but developing the necessary behaviours is more challenging. More important than the specific roles is the ability of the team to deliver a proportionate, competent assessment, and ongoing management. As a frailty service matures, role boundaries will blur, for example, with emergency physicians proving the diagnostic element in the emergency department, or single specialty therapists taking responsibility for physical and environmental assessments, as opposed to dual (duplicate) assessments. The function of the geriatric team is to provide excellent direct clinical care, which aims to address the needs of at least 70% of frail older people within any given setting, but also to be responsible for education and training of ALL staff that will come into contact with frailty. Where resources permit it seems sensible that conventional comprehensive geriatric assessment (geriatric) services focus their efforts on frail older people. This will mean streaming patients into dedicated services at each stage of the patient journey—emergency departments, acute medical units, inpatient wards, 'nongeriatric services' (see Chapter 6.6) and postacute care. Priorities in the clinical management of older people with frailty

General medical care principles apply as much to older people with frailty as anyone else: Early Warning Scores, timely diagnostics, early assertive case management, early goal setting, and so on. For example, an older person with a Modified Early Warning Score (MEWS) of '0' at admission has a very low probability of death (OR 0.14, 95% CI: 0.08–0.24). Compared to their younger counterparts, presentation is usually more challenging in older people with frailty. Typically, non-specific presentations with geriatric syndromes such as falls or delirium may cause diagnostic uncertainty. Communication barriers necessitate involvement of carers and families. Coexisting problems including multimorbidity make assessment and management complex (see Table 6.4.1). Problem lists are helpful, and in addition to traditional diagnoses should include the range of relevant issues identified by comprehensive geriatric assessment. This is achieved most efficiently by coordinated team-work supported by structured but rapid communication, such as frequent brief discussion around marker boards highlighting actions and progress. It can be challenging to carry out a comprehensive geriatric assessment in urgent care settings because of constraints of time and place, or because of the priority of urgent medical treatment (e.g. for septic shock) or resuscitation. But even then, elements of comprehensive geriatric assessment are needed, as factors such as mobility, cognition, and patients' wishes at the end of life have an important impact on clinical management. So challenging as comprehensive geriatric assessment in urgent care might be to deliver, it is important, and urgent care services must adapt to meet this challenge, just as they have adapted to meet the urgent needs for stroke thrombolysis or coronary angioplasty.

Table 6.4.1 Example of the issues to be addressed through comprehensive geriatric assessment (CGA)

Presenting complaints—what matters to the older person
Medical Co-morbid conditions and disease severity, considering current relevance
Consider burden of disease
Medicines review—consider the short term risks and benefits of medications (especially antipsychotics, benzodiazepines, antihypertensives, and analgesics)
Nutritional status

(weight changes, appetite) Psychological Cognition—is there delirium or dementia or both? Mood and anxiety Fears (especially of falling and dying) Functional ability Basic activities of daily living (dressing, eating, washing, continence) Gait and balance—testing mobility is an excellent diagnostic tool, as well as being therapeutic Activity/exercise status (walking distance) Instrumental activities of daily living (housework, driving, shopping) Social circumstances Informal support available from family or friends Social network such a visitors or daytime activities Eligibility for being offered care resources Environment Home comfort, facilities, and safety Use or potential use of telehealth technology, and so on Transport facilities Accessibility to local resources

542 Section 6 Old age medicine Balanced decision-making Balanced decision-making should be governed by values more than standards (e.g. standard ‘troponin pathways’ to rule out cardiac disease). Increasingly, values are being conceptualized in terms of person and family centred care, defined as ‘healthcare that establishes a partnership among practitioners, patients, and their families (when appropriate) to ensure that decisions respect patients’ wants, needs and preferences, and that patients have the education and support they need to make decisions and participate in their own care’. Specific pitfalls in assessment and management Aside from the ‘philosophy of care’ (holistic assessment, values-driven decision-making), the effective management of older people with frailty requires specific knowledge about presentations in this group. The geriatric syndromes such as falls and delirium, and the risks of hospitalization to patient safety, are discussed in more detail in Chapter 6.5. Here we focus on particular considerations in the urgent care setting. Delirium and dementia Dementia and delirium are syndromes: diagnosis depends upon clinical skills. Routine assessment of cognition will identify moderate to severe cognitive impairment, but more subtle presentation can be missed. The four-point Abbreviated Mental Test score (AMT-4) is quick to complete, and has good correlation with the 10-point scale but is easier to apply requiring only place, age, date of birth, and year. The detection of cognitive impairment in the emergency department context should always be accompanied by an assessment for delirium. The 4AT is another strong contender that needs more time and knowledge of English. The same is true for the Delirium Triage Screen followed up by the confirmatory brief Confusion Assessment Method. Delirium has acute onset, the course typically over days and weeks. Failed detection in emergency departments is associated with a sevenfold hazard for increased mortality, and is an independent predictor of hospital length of stay. Symptoms may not only be cognitive: they may be behavioural, psychotic (hallucinations, delusions) or mood symptoms with little or absent signs of disorientation or cognitive impairment. For example, symptoms of depression in a delirious individual may be indistinguishable from people suffering from depressive disorder. The key is to suspect delirium with any sudden change of mental state or behaviour in older people. Characteristic signs of delirium, which also help distinguish this from dementia, are: • clouding of consciousness • reduced attention and concentration • a fluctuating pattern of symptoms and signs It may not be possible for a clinician in the emergency department to be able to tell whether the cognitive impairment they have detected is different from the usual state. Information from carers or third parties is essential and will often hold the key. Both dementia and delirium impact upon treatment, for example, through raising questions about a person’s capacity to make health and welfare decisions, or practical issues such as concordance with therapies. Sepsis Sepsis is a huge challenge in older people with frailty, being both over and underdiagnosed. Sepsis may present with nonspecific features, but it is important to focus on objective signs that point to the most probable diagnosis. Fever can be absent in 30% of older people with sepsis, but presence of fever points to bacteraemia in 90% of older people. Volume replacement will be needed in most

cases unless fluid overload is evident (remember sacral oedema may be the only sign). In a study of effectiveness of 'sepsis six', older people receiving more fluid resuscitation had better survival than the controls. Bundles such as 'sepsis six' can be helpful as guides, but have generally not been validated or designed for older people with frailty. Many abnormalities in older people are incidental, best exemplified by the ubiquitous 'dipstick positive urinary tract infection'. The conundrum here is that asymptomatic bacteruria, which commonly causes positive urine dips, is prevalent (up to 50% of care home residents), and the treatment of positive urinary dips confers no benefit. A clinical diagnosis of urinary tract infection requires the presence of one or more of dysuria, frequency, suprapubic tenderness, urgency, polyuria, and haematuria in the absence of any other good explanation for the apparent sepsis. Table 6.4.2 illustrates the complexity when applying the sepsis six criteria to a typical older person with frailty, presenting with delirium on a background of chronic obstructive pulmonary disease, heart failure, and detrusor instability.

Falls and syncope

Falls are the commonest single reason for older people to present to urgent care, and they are often due to underlying disease or impairment that may be amenable to treatment or modification. Table 6.4.2

Considerations when implementing the sepsis six bundle

- Deliver high-flow oxygen
- Remember CO₂ retention
- Take blood cultures
- Be cautious drawing blood so that delirium related agitation does not result in injury (to patient or staff)
- Higher rate of negative blood cultures
- Administer empiric intravenous antibiotics
- Balanced against the risk of *C. difficile* or antibiotic resistance
- Beware 'sepsis mimics' (the patient was given antibiotics, so it must be sepsis . . . and for example missing the subdural)
- Measure serum lactate and send full blood count
- Validation studies based in 60-year-olds; unclear if prognostic significance holds up in older people with frailty and multiple comorbidities
- Start intravenous fluid resuscitation
- Important as pre-morbid dehydration is common, and volume depletion exacerbated by acute illness;
- Beware fluid overload—frequent smaller boluses titrated against clinical response are mandatory
- Commence accurate urine output measurement
- Do not rush to insert urinary catheters: catheter associated sepsis is common, as is subsequent incontinence due to deconditioning of the detrusor muscle
- Reducing unnecessary catheterizations improves patient safety.
- Bladder scans, weighing incontinence pads, or simply measuring urine volume in continent older people are valid alternatives

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Key in urgent care settings is to carefully differentiate between syncopal and nonsyncopal falls; this is not always easy because of memory impairment, recall bias, or syncope-related ante- and retrograde amnesia, which is common. All too often, direct witness accounts are not available, meaning that the clinician has to base their judgement on the balance of probabilities. An understanding of cerebral perfusion pressure in older people is important, as minor perturbations can result in syncope or presyncope. While international hypertension guidelines promote a focus on tight blood pressure (BP) control, there is ongoing debate about the ideal BP in older people, linked to concerns about perfusion pressure. BP less than 120 systolic in older people, especially where variation with lower troughs is evident, should prompt careful consideration of syncope. It is useful to ask 'do you remember hitting the floor?', and not to accept vague assertions such as 'I must have tripped' as plausible explanations for the fall. The pattern of injury can also provide clues: facial bruising in particular is highly suspicious of syncope. The presence of syncope should prompt a review of medication and a search for underlying causes, at the very least a 12-lead electrocardiogram and routine bloods; other tests may be indicated (see Chapter 6.8). This is particularly true in older people with dementia as they may not present with syncope but increasing confusion and slow falls due to ortho-static

hypotension. Not all patients with syncope require hospital admission. Where there is a high suspicion of life-threatening conditions (e.g. severe aortic stenosis, ventricular arrhythmias), admission may be appropriate. But for most people with syncope there will be a more plausible and more benign explanation, making home-based care a very reasonable option. Increasingly the use of near-patient diagnostics, such as echocardiography, are playing a useful role in supporting clinically and goal-driven decision-making.

Injuries Older people presenting with poly-trauma need to be managed according to advanced trauma and life support (ATLS) principles with special consideration of the fact they do not respond well to prolonged immobilization. Advanced imaging including early computed tomography scanning is important for quick and definitive diagnosis, and as an adjunct to clinical assessment. There is an association between increasing age and poor outcome following trauma, although any individual factor or combinations fail to predict an unacceptable outcome. Hence it is usually advisable to embark on aggressive therapy, irrespective of age or injury, except in the initially moribund individual. Older people who do not respond to this initial resuscitation have adverse outcomes. Responders have a good prognosis, including a complete return to their pre-morbid state.

Pain The use of traditional pain scales can be difficult because of communication barriers, such as cognitive impairment. Alternative assessment processes that rely on nonverbal cues may be more useful in some older people. Pain management in people with dementia may be challenging because of comorbidities, but also because of polypharmacy. The importance of assessing changes in the individual's normal behaviour patterns as an indicator of increasing stress levels or potential pain cannot be underestimated. The modified Abbey pain scale emphasizes involving the person's carers/family. Early, effective pain relief is self-evidently important, but despite the potential of medications such as opiates to cause drowsiness or confusion, for many patients the net benefit reduces the risk or severity of delirium. Medication

While there has been a substantial focus on 'de-prescribing' in older people, driven by guidance such as the STOPP/START criteria and the Anticholinergic Burden Scale, urgent care presentations do present an additional opportunity to review medication appropriateness. Consideration should be given as to where a patient is in their life—their 'trajectory'—informed, when possible, by a description of physical and cognitive function over the last year. Some patients will be clearly entering a palliative phase, in which case, is it helpful to continue antiplatelet therapy or anticoagulants (side effects such as bruising, bleeding, and low-grade anaemia are common and their impact often underestimated in older people with frailty)? The urgent care presentation heralds the need for a new clinically based balance of risks and benefits, which may be transitory, or may be an opportunity for a longer-term change. For example, does someone who is bed-bound really require high dose antianginals if they are no longer exerting themselves? Each de-prescribing scenario should consider the patient's values or best interests, the rationale for continuing the treatment (how will it help?), and the opportunity costs of continuing prescribing (remembering that time spent administering medication is time not spent on comfort care). This can be a challenging task, but informed by guidance, practice, and clinical supervision, could (and arguably should) be a routine part of urgent care assessments. Any changes and the rationale for the changes should be clearly communicated to primary care clinicians and to carers.

Abuse Abuse is common in older people who, because of their situation or circumstances, are unable to keep themselves safe. The nature of abuse and the fact that it is commonplace makes it critical that it is clearly understood that recognizing and tackling abuse is everyone's responsibility. The five types of abuse are discussed in more detail in Chapter 6.11. The urgent care setting presents a possibly unique opportunity to recognize the important symptoms or signs of abuse; be alert to this possibility and take time to examine accordingly. Conversely, evidence of good care may also be

identified and this is helpful in judging the capability and resilience of carers to support an older person, for example, recently painted nails are generally a good sign. Clinical signs that might suggest abuse are shown in Table 6.4.3: none of these features in isolation should be taken as diagnostic, as all may have alternative explanations, but an accumulating pattern of concerns should alert the clinician to the possibility of abuse. End-of-life care and future care planning Remembering that urgent hospitalization of an older person can be a sentinel event that heralds an intensive period of health and social care service use, urgent care clinicians should also ask themselves if this episode is the start of the end-of-life phase. The end of life may be imminent (in which case decision-making should

544 Section 6 Old age medicine be clearly focused on palliative needs), but might be in the next few months, in which case simply starting the conversation in the urgent care setting might be appropriate, with follow-up advance/ future care planning discussions being led by those who know the patient best. Develop a framework From the examples given here, it is clearly apparent that managing older people in urgent care settings can be complex. Unlike patients with single presenting problems, older people will usually present with a range of issues, not just medical, that require addressing in order to achieve an effective management plan. It is not possible to describe every possible scenario; rather, we offer a framework describing overarching principles that can be useful when assessing older people. There are four key points to consider:

- Nonspecific presentations
- Multiple comorbidities
- Functional decline and altered homeostasis
- Differential challenge

Nonspecific presentations Older people with frailty will usually present nonspecifically. This means that the textbook clues for diagnosis may not be present. Do not interpret a lack of specificity as a lack of seriousness or urgency. Recognize the nonspecific presentations (off legs, falls, immobility, delirium, and so on), and use them as a prompt to switch on your diagnostic antennae to focus upon objective pointers towards a diagnosis. The nonspecific presentation itself is a clue; it may be related to a communication barrier (think delirium, dementia, dysphasia, and/or sensory impairment).

Multiple comorbidities Do not content yourself with a single system diagnosis; there will usually be multiple active issues, which often interact and compete for prioritization. List the active diagnoses and stratify them in order of urgency, as this will help you prioritize those that need addressing now, and those that can wait a few hours, but should not be forgotten. Multiple comorbidities often bring polypharmacy; use the urgent care episode to discern if there are active adverse drug events, or opportunities for de-prescribing.

Functional decline and altered homeostasis Older people with frailty will often have pre-existing functional impairment, added to which they will often delay presentation with acute illness, either through inherent reticence or reduced access to support, or even neglect by carers. This means that the impact of an acute event will already have started to manifest in terms of functional ability, which could be exacerbated by enforced bed rest. A period of rehabilitation will often be needed, and increasingly this should be done at home rather than in an institutional setting. Older people with frailty will have altered homeostatic mechanisms, which means that their reserve is impaired, making them more vulnerable to apparently minor insults, but also altering their responses (e.g. altered drug handling). Remember 'start low, go slow' when introducing new drug treatments.

Differential challenge Those most in need are least able to access the services they require, which can be due to intrinsic factors, such as cognitive or sensory impairment, or extrinsic factors, such as the lack of age-attuned services or broader socioeconomic factors.

Comprehensive geriatric assessment Comprehensive geriatric assessment offers a useful structure to ensure that a patient's assessment is holistic, and therefore more likely to result in a management plan that will

be successful. When considering a patient, mentally check-off if you have sought out and identified issues in each of the domains of comprehensive geriatric assessment (Table 6.4.1) when formulating your management plan: Medical: Have you got a working primary diagnosis, as well as a list of comorbidities that are active or important that also require attention? Psychological: Have you assessed for the presence of delirium, dementia, or depression/anxiety? These will have a substantial impact upon ongoing management. Functional ability: You may have made a diagnosis, but how will you get the patient 'clinically stable for transfer'. Being 'medically fit' is meaningless if the person cannot mobilize to the toilet and back safely. Social circumstances: What support exists? What more is needed to enable a return home? Do you know how to access resources that can help? Environment: Is the home setting conducive to ongoing care needs, or are adaptations required? Do you know how to organize a home hazards review for people who have fallen?

Bringing it all together—a clinical example Consider this fairly typical case scenario (Box 6.4.1), which demonstrates the overarching principles described here in action. Table 6.4.3 Clinical signs to watch out for as possible evidence of abuse

- Physical • Bruises to parts associated with rough handling, such as upper arms
- Poor oral hygiene
- Psychological • Obstructing the older person's opportunity to speak
- Reticence to speak in front of 'carers'
- Financial or material • Poor state of clothing
- Undernutrition
- Sexual • Bruises to private parts such as introitus or vagina
- Sexually transmitted infections
- Neglect and acts of omission • Late presentation of acute illness
- Unwashed body or clothing

6.4 Older people and urgent care 545 Once the initial assessment is complete (in this case taking no more than 1–2 hours in total, using the care home information, near patient testing and hospital systems, and the most important diagnostic tool—the telephone), a stratified problem list can be formulated, as shown in Table 6.4.4. Multiple issues have been identified as probable contributors to the fall. Now that these have been clearly identified they can be individually addressed—either immediately or over time—in the clinical management plan (Table 6.4.5). It is important to note that, despite a low Early Warning Score suggesting no need for escalation, there is substantial frailty-related risk.

Transfer from urgent care settings To facilitate more detailed assessment in selected older people, the urgent care services will need to have timely access to therapy staff and social services support. These are increasingly being established under the guise of 'geriatric emergency medicine', with service evaluation level evidence of impact. Having undertaken a rapid, holistic assessment of a patient (reflecting the domains of comprehensive geriatric assessment, Table 6.4.1) and established a stratified problem list and treatment plan, the next phase of decision-making should focus upon where is the best place to provide this care. Several randomized studies have evaluated geriatric emergency medicine type interventions linking in with community services, but with limited evidence of impact; this is at least partly related to the trials testing undertheorized and underdeveloped interventions. Given the wealth of information about the benefits of comprehensive geriatric assessment, ongoing efforts are required to develop and refine more sophisticated, integrated interventions that enable the delivery of comprehensive geriatric assessment. Areas of uncertainty, controversy, and future developments Many older people will have ongoing health issues that need to be addressed, although not necessarily requiring a hospital admission. For such people, timely access to extended scope home services can facilitate early discharge from urgent care; there is robust evidence that such 'hospital at home services' can be effective and even save lives. Urgent care services will need to know about how and when to access community services in a timely manner to support early discharge. Box 6.4.1 Emergency case scenario An 89-year-old lady, Vera, presents

to the emergency department, having been found on floor in her care home; there is no meaningful history from the patient as she is drowsy and not able to recall the event. (NON- SPECIFIC PRESENTATION) Past medical history (from the care home information): 'recurrent UTI', Alzheimer's dementia, hypertension and stroke. (MULTIPLE CO- MORBIDITIES, all of which could be contributing to possible delirium) Medications: co-codamol 30/500 TT QDS (initiated two months ago following fall and right shoulder injury), bendroflumethiazide 2.5 mg, OD atenolol 50 mg, OD donepezil 10 mg OD, aspirin 75 mg OD, simvastatin 40 mg OD, trimethoprim 100 mg ON. (POLYPHARMACY—opioids can cause constipation, which can cause urinary retention which can cause UTI; antihypertensives that may contribute to falls risk) A phone call to the care home establishes that she was found on the floor at 4 am, having last been seen in bed at 2 am. Vera was found lying on her right side and had been incontinent of urine. The care home assistant reported that she had observed a Vera to have a reduced appetite for last 24 hours, associated with nausea. Vera's bowels had last opened two days ago. (ENVIRONMENTAL and SOCIAL SUPPORT NETWORKS—in this case helping with the diagnostic formulation) Vera is usually independently mobile, but requires supervision and prompting to feed herself, wash, and dress. She is occasionally incontinent of urine and wears pads overnight, but continent with bowels. Although usually disorientated, Vera can hold a conversation and answer yes/ no for simple choices. She has been at the care home for three years. (FUNCTIONAL IMPAIRMENT—in this case helping establish a baseline and guide treatment aims, as well as identifying a substantial change from baseline that suggests a diagnosis of delirium) Examination findings: clinically dehydrated (jugular venous pressure (JVP) not visible lying flat); lying BP 105/64; too drowsy to stand; HR 54 bpm regular (confirmed on ECG); neuro-drowsy and disorientated— AMTS 2/10; resp-basal crackles (note—often hypostatic and not always a sign of pulmonary oedema); GI—abdomen soft, BS present, lower abdominal discomfort on palpation; PR—loaded rectum; urinary—palpable bladder; joints—bruised right shoulder, movement preserved in all four limbs, no bony/ spinal tenderness; no skin sores, nail varnish carefully applied recently. Investigations: post-void bladder scan: 710 ml (normal <200 ml) U&E: creatinine 166 micromol/litre (baseline 72), urine dip not tested (unable to obtain specimen); previous MSU: E. coli resistant to trimethoprim. CK/bone/LFT/ FBC/TSH/haematinics: normal ranges. Computed tomography scan (CT) of head (fall and confusion): disproportionate hippocampal atrophy and moderate burden of small vessel disease, mature infarct noted right temporal-parietal lobe. Table 6.4.4 Comprehensive geriatric assessment in practice:

The problem list Multifactorial fall, due to: • Delirium/dementia • Bradycardia (medications: atenolol/ donepezil) • Neurological deficit (previous stroke) • Hypotension—medications and fluid depletion Reduced oral intake due to: • Delirium • Reduced appetite during illness • Constipation • Inaccessible drinks and absence of usual prompts Constipation due to: • Opioids • Reduced mobility, and so on Urinary retention due to: • Constipation/faecal impaction +/- donepezil causing: • Urinary tract infection (drug resistant) • Acute (mixed pre and postrenal) kidney injury Polypharmacy • (Opiates/ β -blockade/thiazide) Hypoactive delirium secondary to issues above

546 Section 6 Old age medicine Key components of an effective early supported discharge service include: • An accurate, holistic clinical management plan that is clearly communicated to community teams in real time. • Capability and capacity in community teams—services need to be able to respond in real time, accepting referrals 24/7 that can assure a same or next-day response.

- Competence to be able to deliver the interventions required—as illustrated with the patient Vera, just discussed; this might include monitoring parenteral fluids, checking bloods, and reviewing medication in addition to usual care issues such as continence care. This may require the development of ‘vertically integrated’ services that can deliver the components of comprehensive geriatric assessment across the interface. Increasingly community and hospital based teams are blurring the boundaries, through staff rotation and shared teaching/training, to develop such capabilities.
- Robust governance and information sharing—clarity is required over who is responsible for what and when; shared governance systems supported by easy access to shared clinical information and senior clinical support (e.g. through locality based community geriatricians).

Robust assessment of older people with frailty in the first hours of an urgent care episode, combined with early supported discharge has the potential to achieve the nirvana of sooner, faster, better care, potentially at reduced cost, and with better outcomes.

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Table 6.4.5
Comprehensive geriatric assessment in practice: The clinical management plan

Delirium—(NONSPECIFIC PRESENTATION)

- Address hydration (consider parenteral fluids given drowsiness and likely lower oral intake), hypoxia, hypothermia, hypotension, and hypoglycaemia
- Treat infections—consider broad spectrum antibiotics given established resistance to many antibiotics (including trimethoprim), pending CSU obtained from in-out catheter to drain bladder
- Consider urinary retention: plan for follow-up bladder scans rather than insert a catheter
- Hold opioids temporarily to facilitate recovery from delirium, but continue paracetamol (NSAIDs contraindicated due to acute kidney injury) (review POLYPHARMACY)

Falls risk

- Reduce/stop β -blocker as BP low and likely to be contributing to falls risk; will require ongoing monitoring (POLYPHARMACY)
- Stop and review later the Bendroflumethazide (or Furosemide) given dehydration and low BP (also limited evidence of benefit from tight BP control in established dementia) (POLYPHARMACY)
- Do not stop donepezil (as it is likely to help with delirium recovery), but monitor ECG response to withdrawal of β -blocker (POLYPHARMACY)
- Nurse in an environment less likely to aggravate delirium (reduced noise, low lighting, orientation cues). Later, arrange a home hazards’ review, consider assistive technology such as pressure sensors as several fixed irreversible drivers of falls risks—stroke, dementia (ENVIRONMENTAL factors)

Avoid or treat constipation

- Enema for impaction
- Add in laxatives as likely to need to restart opioids for shoulder pain (POLYPHARMACY)

Reduce risk of dehydration

- Get baseline and then monitor U&Es—can expect recovery over the next few days assuming above enacted—re-test in a few days (HOMEOSTATIC FAILURE) • Frequent offers of oral fluids with recording of cumulative intake (accurate fluid balance is frequently unnecessary or not feasible, but intake can be assessed) • Consider subcutaneous route if oral intake inadequate Consider FUNCTIONAL IMPAIRMENT

- Will require rehabilitation to accompany (not follow) medical treatment—aim to recover back to baseline status over a period of a week or so • consider ‘hospital at home’ services to support care home staff if patient returns there Consider SOCIAL NETWORKS/SUPPORTS

- Consider both their capacity and resilience • Will clearly need support with ADLs whilst delirious—could this be best provided in the care home, in a familiar environment, with staff empowered by a detailed and holistic management plan? • Contact family to establish patient/family centred care plan—what would the patient want in the circumstances? CSU, urethral catheter specimen; ECG, electrocardiogram; NSAIDs, nonsteroidal anti-inflammatory drugs; ADLs, activities of daily living; U&Es, urea and electrolytes.

6.4 Older people and urgent care 547 Dellinger RP, et al. (2008). Surviving Sepsis Campaign: international guidelines for management of severe sepsis and septic shock: 2008. *Crit Care Med*, 36, 296–327. Edmans J, et al. (2013). Specialist geriatric medical assessment for patients discharged from hospital acute assessment units: random- ized controlled trial. *BMJ*, 347, f5874. Elpern E, et al. (2009). Reducing use of indwelling urinary catheters and associated urinary tract infections. *Am J Crit Care*, 18, 535–41. Fox MT, et al. (2012). Effectiveness of acute geriatric unit care using acute care for elders components: a systematic review and meta- analysis. *J Am Geriatr Soc*, 60, 2237–45. Franklin M, et al. (2014). Identifying patient-level health and social care costs for older adults discharged from acute medical units in England. *Age Ageing*, 43, 703–7. Gill TM, et al. (2010). Trajectories of disability in the last year of life. *N Engl J Med*, 362, 1173–80. Graf CE, et al. (2012). Can we improve the detection of old patients at higher risk for readmission after an emergency department visit? *J Am Geriatr Soc*, 60, 1372–3. Han JH, et al. (2011). Delirium in older emergency department pa- tients: recognition, risk factors, and psychomotor subtypes. *Acad Emerg Med*, 16, 451–7. Hippisley-Cox J, Coupland C (2013). Predicting risk of emergency admission to hospital using primary care data: derivation and validation of QAdmissions score. *BMJ Open*, 3, e003482. King’s Fund (2001). Variations in Healthcare: The Good, the Bad and the Inexplicable. <http://www.kingsfund.org.uk/publications/variations-health-care> Lowthian J, et al. (2015). Discharging older patients from the emergency department effectively: a systematic review and meta- analysis. *Age Ageing*, 44, 761–70. Marco C, et al. (1995). Fever in geriatric emergency patients: clin- ical features associated with serious illness. *Ann Emerg Med*, 26, 18–24. Sager MA, et al. (1996). Functional outcomes of acute medical illness and hospitalization in older persons. *Arch Intern Med*, 156, 645–52. Shepperd S, et al. (2009). Early discharge hospital at home. *Cochrane Database Syst Rev*, 1, CD000356. Silvester KM, et al. (2014). Timely care for frail older people referred to hospital improves efficiency and reduces mortality without the need for extra resources. *Age Ageing*, 43, 472–7. Wallis SJ, et al. (2015). Association of the clinical frailty scale with hospital outcomes. *QJM*, 108(12), 943–9.