Position Statement No. 14
The Management of Older Patients in the Emergency Department. Revised 2015

1. Older patients often have more complex medical and social issues than other patients, and higher prevalence of disability. They may be less able to communicate with emergency caregivers. Involvement of carers, and communication with general practitioners, Aged Care Assessment Teams and residential care facilities is important. These patients value ED caregivers taking a leadership role in coordinating management of all their concerns, not just the primary complaint.

2. An older person friendly emergency department will take an evidence-based, inter-professional approach to initiation of care, disposition planning and post-emergency follow up.

3. The emergency department should be a patient-centred environment that optimises normal functions, and minimises problems such as pain, delirium and pressure areas.

4. Screening for at-risk seniors should be routinely performed on all over-65s to identify those who would benefit from focused geriatric and functional assessment.

5. Functional assessment of patients identifies those experiencing functional decline, and those at risk of it, allowing for the formulation of a management plan for the acute problem and referral to appropriate community services.

6. When managing older trauma patients, trauma team involvement should be initiated earlier than would be considered for younger patients.

7. Structured screening and assessment of patients presenting with falls can reduce risk of further falls.

8. Any patient who presents as confused should be screened for cognitive impairment, with a referral for further assessment where appropriate. Consideration should be given to preventing and managing delirium and optimal management of patients with dementia.

9. A multidisciplinary approach to preventing medication errors and polypharmacy should be taken, including medication reconciliation, and education on prescribing for the older people.

10. Compliance with National Emergency Access Targets may improve patient outcomes, but care must be taken to ensure increased care interfaces do no impact on patient care.

11. Inter-professional and interdisciplinary education on geriatric principles should be provided to emergency department caregivers to improve confidence in dealing with older patients and increase appropriate decision making.

This position statement represents the views of the Australian and New Zealand Society for Geriatric Medicine. This statement was approved by the ANZSGM Federal Council on 5 May 2015. This paper was written by Dr Lucy Kilshaw with acknowledgement to Dr Philip Street for earlier contribution.

BACKGROUND PAPER

The populations of Australia and New Zealand are ageing, with the Australian Bureau of Statistics projecting that by 2056, up to 24% of the population will be 65 years and over, and that the percentage of the population aged 85 years or over is expected to quadruple up to 7.3%. Similarly in New Zealand, by the late 2030’s a quarter of the population will be aged over 65 years. These changing demographics impact significantly across the health care system.
The proportion of patients presenting to public hospital emergency departments (EDs) who are aged 65 years and over increased to 18.8% in 2011-2012. The rate of presentation for older patients is increasing at a rate faster than for younger patients, and this group also shows an increased rate of multiple representations. Emergency caregivers have realised for many years that older patients are not optimally served in modern EDs. The aim of emergency care for the older patient is “to alleviate suffering while providing prompt diagnosis of life-threatening conditions to prolong quality of life, while respecting patient and family autonomy.” Existing models of ED care were designed for the acutely ill and injured patient rather than a medically complex and functionally impaired senior, and may not meet this aim. There is increasing recognition in both the emergency and geriatric medicine literature that a distinct model of care for the older patient in the ED is required.

**Characteristics of the older ED patient**

This heterogeneous group of patients with complex medical and social issues present a challenge to emergency caregivers. Older patients present with more complex medical conditions, have longer ED and hospital stays, and are more likely to be admitted. They are more likely to live alone, be referred by their general practitioner and arrive by ambulance. They also have higher rates of consultations, investigations and procedures, and have higher risks of adverse health outcomes following discharge.

Older patients have special needs compared to other groups in EDs. They have a high prevalence of physical and cognitive disability and complex social circumstances. An older patient may be less able to communicate information due to a variety of factors including cognitive impairment, visual or hearing impairment and delirium. The inclusion of carers in formulating and communicating a management plan is often vital to improve the relay of information. An important feature of geriatric medicine is that serious surgical or medical illness may present in a subtle or atypical way. Diagnosis may not be as straightforward as in younger patients, requiring clinical suspicion of a broader range of conditions. The picture may be complicated by co-existing medical conditions impacting on the chief complaint. ED assessment of older patients should take these factors into account, prompting a more thorough history and physical examination. The terms acopia and social admission are often applied to older adults with atypical presentations of illness, cognitive symptoms, or a relatively minor insult that has major functional consequences due to lack of physiological reserve, or frailty. The ANZSGM believes these terms should be removed from the medical lexicon and instead a thorough assessment of the patient must be completed to seek a medical precipitant. Absence of such an identifiable medical cause should not prevent hospital admission if a patient cannot functionally manage in the community.

Advanced care directives (ACDs) are now widespread throughout most states and territories in Australia, although there are still some jurisdictions where legislation remains ambiguous. In New Zealand, ACDs are enshrined in the Code of Health and Disability Services Consumer’s Rights. ACDs should be readily accessible to emergency practitioners to guide end-of-life decisions. The right to autonomy must be upheld, and all patients must have their preferences sought, where possible, regarding management decisions. Many patients with cognitive impairment retain ability to express their management preferences and priorities for treatment, although assessment of capacity may be required.

Older patients of lower clinical urgency present to ED because of a perception they will receive more timely and specialised care, and a perceived access block to primary and specialist care. A systematic review of older adults’ view of quality emergency care found patients valued medical and nursing staff taking a leadership role in care, including managing disposition (including needs in the community), assuming responsibility for all patient-related issues (not just the primary presenting complaint), and orchestrating efforts to address social/functional needs. Quality of communication and education was important in allaying anxiety, particularly in terminal patients.

**The older person-friendly ED**

Care coordination teams have been widely implemented in Australian public hospital EDs for several years. A retrospective analysis of electronic data showed trend to decreasing readmission and representation rates over time, but clinical effectiveness of ED Care Coordination Teams (CCTs) requires further investigation.
There is evidence that comprehensive geriatric assessment can reduce rates of 30-day hospital readmission, can delay time to first ED admission, and can maintain greater levels of physical and mental functioning in patients receiving intervention.\(^1\)

Three randomised control trials\(^2\)-\(^4\), all including use of a specially trained nurse to perform geriatric assessment and a component of home-based care, showed improvements in the functional status of patients involved. Targeting a high-risk group appears to be more effective than applying interventions broadly.\(^5\)

The concept of the older person-friendly ED has been proposed as an achievable concept representing the baseline level of geriatric care to which all adult EDs should aspire.\(^6\) A systematic review\(^7\) of ED-based case management models has been conducted, and on qualitative analysis, 8 distinct model characteristics have been identified in the studies with positive results:

1. Evidence-based practice model
2. Nursing clinical delivery involvement or leadership
3. High-risk screening
4. Focused geriatric assessment
5. Initiation of care and disposition planning in the ED
6. Inter-professional and capacity-building work practices
7. Post-ED discharge follow-up with patients
8. Establishment of evaluation and monitoring processes

This model offers an evidence-based, interprofessional approach to care that can also be a framework for future research.

The Elder-friendly ED assessment tool, a quality assessment tool, has been developed, incorporating the subscales of screening/assessment, discharge planning and community services;\(^8\) although further validation is necessary, such tools are important steps in quality improvement of geriatric-ED care models.

ED environment

Older patients are more likely to require assistance with basic functions such as toileting, walking and nutrition. The physical environment needs to be optimised to allow for this. The physical environment also contributes to problems such as pain and discomfort, pressure areas and delirium. There is growing evidence that a patient-centred environment improves outcomes for older ED patients, although further research is needed.\(^9\) A UK study of a short stay ward for seniors attached to ED reduced hospital stay, improved quality of care given to older patients and decreased pressure on hospital beds.\(^10\) A patient-centred environment would include things such as call bells in reach, natural lighting, attention to noise levels, adequate toilet facilities, privacy during triage, examinations and toileting, removal of safety hazards such as loose cords or wires, access to physical aids to direct them towards services, such as a telephone in the room.\(^11\) Access to interpreters and written information for patients from culturally and linguistically diverse backgrounds is important to reduce isolation.\(^12\) Provision of facilities to enable attendance of caregivers and family members is important, particularly for patients with cognitive impairment.

ED based screening for at-risk seniors

There have been many tools developed to try and provide emergency physicians with accurate and sensitive information regarding risk of adverse outcomes in older patients, to help inform decision making about the need for admission or discharge. Limited psychometric testing has been completed on these functional assessment tools. A recent systematic review found the best evidence of predictive validity was for two assessment tools suitable for use in triage, the Identification of Seniors at Risk (ISAR) and the Triage Risk Screening Tool (TRST).\(^13\) The ISAR comprises six questions on functional dependence including pre-morbid function, acute change, recent hospitalisation, impaired memory and vision, and multiple medications.\(^14\) When used in ED, ISAR can identify patients at high risk of hospitalisation, return ED visits, institutionalisation and death at 6 months from ED visit.\(^15\) The TRST has comparable results in predicting older ED patients at risk of ED revisits, hospitalisation or nursing home placement following ED discharge.\(^16\) The TRST is a six item simple nursing screen including history or evidence of cognitive decline, difficulty walking, transferring or recent falls, five or more medications, ED use in previous 30 days or hospitalisation in previous 90 days, and ED registered nurse professional recommendation.\(^17\) With both these tools, there is the expectation that a
more comprehensive functional assessment be completed for those patients identified to be at risk.

Functional assessment

52% of older patients discharged from ED are at risk of functional decline. Functional decline itself can contribute to an ED visit and hospitalisation in older patients. In Australia, an increasing number of community-dwelling older people rely mainly on ED for management of their health, and rather than requiring hospital admission, their presentation to ED should be seen as an opportunity to manage their acute problem and assess their long-term need, including the referral to community services. The use of a number of functional assessment tools has been extrapolated to the ED without extensive assessment of their validity in this setting. These include the Barthel Index, the modified Instrumental Activities of Daily Living Index (IADL), the Domain Management Model and the Functional Independence Measure (FIM). The Older Adult Resources and Services (OARS) was recently recommended by one systematic review as being the only English-language assessment to have undergone extensive validation in the ED, with evidence for its predictive validity. The OARS includes 14 items: 7 items assessing basic ADLs (eating, dressing, grooming, walking, transfers in and out of bed, bathing, continence) and 7 items assessing instrumental ADLs (using the telephone, travel, shopping, meal preparation, housework, taking medicine, and management of finances).

Older trauma patients

Trauma patients are considered to be those with any wound or injury, and a trauma team response is activated when injuries meet certain physiological, anatomic or mechanism of injury criteria. In Australia in 2010-2011, the largest proportion (27.4%) of patients requiring hospitalisation for injury were aged 65 and older. There is increasing recognition that older patients need to be triaged and managed differently to other patients. Patients over 70 years have a higher mortality for a given severity of injury. Median cost per patient is higher for older trauma patients. Falls make up a large proportion of trauma cases in older patients. Physiologic derangements can be masked by co-morbidities and medications, and co-morbidities can act in synergy with the traumatic event to lead to higher morbidities for that particular injury, thus earlier trauma team involvement should be initiated than would be considered for younger adults. Older patients involved in trauma are frequently under-triaeged, although this does not impact on mortality. The comorbidity-polypharmacy score (CPS) has been proposed as a useful adjunct in older trauma patients who are not critically injured, but who may be under-trauged. This tool requires further validation.

The concept of the geriatric trauma service has developed in the US, with multidisciplinary teams including geriatricians, orthopaedic surgeons, neurosurgeons, and allied health, led by geriatric trauma surgeons. Incorporation of geriatric care into the management of older trauma patients, beyond existing orthogeriatric services, is a developing concept in Australia and New Zealand and is an issue for consideration when planning the future direction of trauma services.

Secondary prevention of falls

Falls in the older population are a common presenting complaint to EDs. An Australian study demonstrated older patients attending ED after a fall had high injury rates, admission rates and often prolonged hospitalisation. They consume significant healthcare resources and are an easily-identifiable at-risk population. In a UK randomised controlled trial of a structured interdisciplinary assessment of people presenting to ED with falls, medical, occupational therapy and referral on to appropriate services, versus usual care showed a significant reduction in risk of further falls in the intervention group. A busy ED may not be the appropriate setting for a falls risk assessment, however there are effective screening tools which can identify high risk patients for subsequent referral and management in a dedicated falls service, for example the Falls Risk for Older People in the Community (FROP-Com), which is a multifactorial falls risk assessment tool which may be used in time-limited situations.

Residential aged care facilities and the ED

Several studies suggest that residents of residential aged care facilities (RACFs) have high rates of ED presentation, hospitalisations and representation. Given the frailty and multimorbidity of residents of RACFs, and the limited resources for managing acute medical problems within facilities, it is not unexpected that this is the case. Careful consideration must be given to the question of whether rates of transfer from RACFs can be
reduced, while still providing appropriate care to those patients who do need to be in an acute hospital setting. Many measures of potentially preventable hospitalisation have been described in the literature, but none have been validated in the population of older patients in residential care, making it difficult to estimate the extent of this problem. A study from the UK suggested that geriatrician input into nursing homes reduced hospital admissions and was cost effective. The intervention studied included medical advisory meetings between geriatrician, GP and care home managers; daily telephone advice from geriatricians; provision of intravenous antibiotics and fluids to nursing home patients by an external health care company; and geriatric support for end of life care. There is currently a paucity of data, in particular randomised controlled trials, assessing the benefits of interventions in nursing homes to reduce transfer to ED. Further research is needed on the clinical benefit and cost effectiveness of transfer from residential care for ED care, and of alternative programs to reduce transfer.

Cognitive impairment

Older adults in EDs commonly have impaired cognition, and this is often not initially recognised. It is important because patients with delirium are more likely to have prolonged length of stay than those without delirium. Many older adults in ED do not receive a cognitive assessment, and more than half of patients screened positive for cognitive impairment for the first time were not referred for outpatient assessment. One Irish study showed one third of medical, surgical and emergency physicians caring for patients in the emergency department felt they lacked expertise to assess cognition, and also that time, privacy and noise limited screening of cognition in ED. The signs of delirium can be subtle, and are often missed if not actively screened for. Any patient who presents as confused should be screened for cognitive impairment. The best screening tool for use in the ED setting is uncertain. The Confusion Assessment Method is a concise tool with good sensitivity and specificity for detecting delirium and is widely used.

There is little evidence for current recommendations for management of patients with dementia in the ED, many of which have been extrapolated from residential care settings. The Delirium Care Pathways, developed by the Australian Health Ministers’ Advisory Council provide guidance on the prevention, diagnosis and management of delirium relevant to the ED setting.

The approach to the management of patients with dementia should include adopting strategies for optimal communication with the person with dementia; management of behavioural complications of dementia, and physiological complications (such as dehydration, untreated pain, functional incontinence); management of the physical environment (space and lighting for carers, space that reduces environmental overload, location close to nursing staff, consistent staff member to assist the patient to navigate the space). Staff education is important.

Medication for older people in EDs

Polypharmacy has been identified as an independent risk factor for hospital admission. Adverse drug reactions (ADRs) occur frequently in older patients in the ED and ADRs and adverse drug interactions are a significant cause of hospital admission. This may be due to reduced drug metabolism and elimination, cognitive dysfunction and sight impairment limiting compliance. With older patients being transferred to and from residential and transitional care, and trends towards shorter length of stay and increased use of home-based care, opportunities for medication errors increase with each transition. Seniors are shown to be on inappropriate medication prior to an ED visit, receive potentially inappropriate drugs in ED and be given potentially inappropriate drugs at ED discharge. A multidisciplinary approach needs to be taken to address this issue. Pharmacy input into medication reconciliation and review is invaluable, but education on prescribing for the geriatric population and vigilance from both nursing and medical staff is equally important.

ED access block

National Emergency Access Targets have now been introduced across Australia, with the aim of either discharging or admitting patients from public hospital EDs within 4 hours. In New Zealand, the 6 Hour Rule has the same aim. We know that older patients have longer ED stays, and 84% of patients from residential care remain in ED longer than 4 hours. In Western Australian tertiary hospital EDs, there was a reduction in mortality from 1.12% to 0.98% between 2009-10 and 2010-11, along with a decrease in access block, coinciding with the introduction of the 4-hour rule. The optimal length of stay in ED has
not been determined, and early discharge or admission may be detrimental, as is prolonged stay in ED.\textsuperscript{60} Care must be taken that increased care interfaces do not impact on patient care, for example by increasing risk of delirium, medication errors, duplication of geriatric assessment or delays to discharge.

Education beyond the geriatric medicine community

Emergency medicine education has not emphasised geriatric principles in the past.\textsuperscript{62} There is now an improved focus on geriatric care in emergency medicine curricula,\textsuperscript{62} and there is evidence that this improves knowledge of geriatric principles,\textsuperscript{63,64} appropriate decision making,\textsuperscript{63} and confidence in dealing with geriatric patients.\textsuperscript{64} It is equally important to have knowledgeable nursing staff, who understand the specific care needs of this group of patients.\textsuperscript{65} It has been hypothesised that nurses and mid-level clinicians, whose broad skill sets span both medical and social domains, are best placed to lead the complex care of older patients in ED.\textsuperscript{17} Therefore, inter-professional and interdisciplinary learning must be fostered to equip emergency caregivers with the necessary knowledge and skill to manage older patients appropriately from the time of initial presentation.

Summary

The role of the emergency department in caring for the ageing population of New Zealand and Australia continues to increase. The awareness and level of education of geriatric principles is also increasing amongst emergency caregivers, and the Australasian College of Emergency Medicine has a policy addressing this issue.\textsuperscript{66} There is still some progress needed, though, in developing and implementing the older person-friendly model of care in Australian and New Zealand emergency departments. An integrated, inter-professional approach is required, with timely input from specialist geriatric services, strong links to primary and residential care and improved exchange of information. There are still many areas of uncertainty in the care of the older person in the ED, and a collaborative approach between geriatric and emergency medicine is required to plan future research, education and healthcare policy.

13. Caplan GA, Williams AJ, Daly B, Abraham K. A randomized, controlled trial of comprehensive geriatric assessment and multidisciplinary intervention after discharge of elderly from the...


60. Street M, Marriott JR, Livingston PM. Emergency department access targets and the older patient: a retrospective cohort study of emergency department presentations by people living in