

1. An older patient may have difficulty communicating accurate and comprehensive information to emergency department (ED) staff. Information regarding their clinical, functional and social circumstances should be sought from family, carer, General Practitioner, Aged Care Assessment Team and any other involved agencies.
2. Acute illness in older patients often presents with non-specific symptoms such as immobility, falls and delirium affecting their ability to function at home but categorized as situational in nature. Studies demonstrate patients admitted for social reasons have higher mortality than age- and sex-matched controls. The ANZSGM believes the terms acopia and social admission should be removed from the medical lexicon. A thorough medical assessment of the patient must be completed to exclude a medical precipitant. Absence of such an identifiable medical cause should not prevent hospital admission if a patient cannot functionally manage in the community.
3. A geriatric assessment team, led ideally by a consultant geriatrician, should provide a prompt consultation service for older patients with complex management and discharge needs presenting to ED.
4. Referral processes from ED to acute and sub-acute hospital geriatric beds should be efficient and timely to minimize access block. Streamlined referral processes should exist from ED to community geriatric services and outpatient geriatric care.
5. ED staff should employ a validated screening tool to identify older patients at risk of re-presentation or poor outcome after ED discharge. Once identified, a multidisciplinary care coordination team should provide a safe and effective discharge for that patient from ED.
6. Key patient medical information from GP and hospital databases should be provided to ED staff at all hours. Appropriate transfer information forms to optimize communication on patient care should accompany patients transferred between residential care facilities (RCF) and ED. Patients transferred back to a RCF require documented follow-up and an adequate medication supply until the LMO can review them. Failure of this increases utilization of resources and likelihood of re-presentation. All management strategies should be communicated from ED to their GP and other involved agencies.
7. Older patients attempting suicide are more likely to have serious intent and are more likely to succeed. All such patients presenting with intentional drug overdose or other deliberate self-harm must be referred for urgent psycho-geriatric or psychiatric assessment. A comprehensive discharge plan and follow-up is required for these patients prior to ED discharge.
8. In cases of suspected or confirmed elder abuse, admission to hospital should be considered to remove the patient from a situation of risk, unless their safety can be assured in their home or in alternative accommodation.
9. ED care of the older patient should not vary in quality from that given to a younger patient. Older patients should receive care based on the best available scientific information.
10. The concept of 'medical futility', defined as an intervention that is unlikely to produce any significant benefit to the patient, is sometimes applicable to older patients in ED. Information on patients' Advanced Care Directives should be made available to ED caregivers who can respond appropriately to individual patient choices.
11. A functional, psychosocial and cognitive assessment of older patients should be made if considering discharge from ED. Instruments to assess disability should be available and used routinely by staff working in ED. If these reveal difficulty in carrying out activities of daily living, because of previous disability, acute illness, injury or ED treatment then the patient should be discharged only if appropriate supports are available and readily accessed.
12. When discharging an older patient from ED, the ED discharge coordinator or social worker should organize appropriate transport. Older patients living alone should not be discharged from ED overnight unless in exceptional circumstances. On discharge home, older patients should be accompanied by a family member, friend or carer.
13. Best evidence nursing care practices for pressure area identification and prevention, falls minimization and provision of adequate nutrition and hydration should begin on admission to ED.
14. Repeat ED attendances may represent a failure of on-going care and require prompt intervention. Reasons for re-presentation should be sourced. The patients' clinical and investigation findings should be reviewed to ensure unsuspected medical conditions have been not been missed.

BACKGROUND PAPER

Population demographics are changing and the increase in the aged population is affecting many sectors of the health care system including the emergency departments of public hospitals. The Australian Bureau of Statistics population projections indicate that by the year 2051 the proportion of the total population aged over 65 could double to 24% [1]. Older patients make up an increasingly important group served by EDs.

Emergency caregivers have realised for many years that older patients are not optimally served in modern EDs [2]. Recent research into novel types of geriatric care in the ED has begun to target this important and previously understated population.

Emergency department use

Older people are higher users of EDs compared to their proportion in the general population. Older patients attending EDs are more likely to live alone, be referred by their general practitioner and arrive by ambulance [3]. Older people wait longer in EDs and have a higher likelihood of significant pathology [3]. They have higher rates of consultations, investigations and procedures, are more likely to be admitted and have higher risks of adverse health outcomes following discharge [3].

In the Australian Health and Welfare report 2004-05, persons 65 or older made up 35 % of all public hospital separations ('separation' is the term used to refer to the episode of admitted hospital care). In the same report persons 65 years and older made up 17% of all non-admitted patient ED occasions of service [4]. The percentage of patients over 65 attending the ED can be expected to increase as the population ages.

Special needs of the older ED patient

Older patients have special needs compared to other groups in EDs. Current models of ED care were designed for the acutely ill and injured patient rather than a medically complex and functionally impaired senior [5]. Older patients have a high prevalence of physical and cognitive disability and complex social circumstances. This requires a different approach from ED staff than is suited to younger patients. An older patient may be less able to communicate information due to a variety of factors including cognitive impairment, hearing impairment and delirium. The presentation of serious surgical or medical illness being subtle and atypical in older patients is an important principle of geriatric medicine. For example, infections may not have the classical signs or symptoms usually seen in younger patients and may present atypically with functional decline, falls and delirium without localising signs. 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 this into account, prompting a more thorough history and physical examination [6]. Advanced Care Directives (ACD) used in relation to end-of-life issues currently have ambiguous legal status in some Australian jurisdictions. Although not legally binding in some States and Territories, patient wishes stipulated in an ACD can assist ED care-givers during end-of-life decisions.

Functional assessment

A functionally based assessment in ED of an older patient is recognised as an important component of review. Functional decline itself can contribute to an ED visit and hospitalisation in older patients [7]. Several functional assessment tools, such as the Barthel Index, the modified Instrumental Activities of Daily Living Index (IADL) and the Functional Independence Measure (FIM) are routinely used in geriatric wards. Which is the best tool for EDs is undecided. The Domain Management Model [8] is an example of a formulated approach and standardised language for managing older patients in EDs. It encompasses 4 domains in treating older patients: medical and surgical issues; mental status, emotions and coping; physical function; and living environment. This model claims to educate health care staff, facilitate team care, improve flow of relevant information, improve decision-making, and facilitate more meaningful interactions with patients. There is increasing evidence for a thorough multi-dimensional older patient assessment with a different emphasis than that used in younger, non-disabled patients to avoid missing important information or inappropriate ED discharge.

Cognitive impairment

Older adults in EDs commonly have impaired cognition, and this is often not initially recognised [9-15]. Case note series [12-13] have shown low detection rates of mental status impairment in EDs. This can affect the reliability of information given by the patient and reduce understanding and compliance with any proposed discharge instructions. Patients with delirium have been shown to be discharged from ED [12-13] often with a lack of home care and social support [14].

It is unclear which screening tool is ideal for the detection of cognitive impairment in EDs. Due to time constraints, a short and sensitive test for cognitive dysfunction is more suitable for EDs [6]. The Confusion Assessment Method (CAM) is a widely used diagnostic tool for delirium with good sensitivity and specificity [47].

ED based screening for at-risk seniors

Several North American and Canadian papers have attempted to identify patients at ED triage who are at higher risk of adverse outcomes [16-20]. The Identification of Seniors at Risk (ISAR) tool [20] comprises six questions on functional dependence including pre-morbid function, acute change, recent hospitalisation, impaired memory and vision, and multiple medications. When used in ED, ISAR shows good predictive validity in identifying seniors at high risk of hospitalisation, return ED visits, institutionalisation and death at 6 months from ED visit [21, 22]. A similar screen called the triage risk screening tool (TRST) has comparable results in predicting older ED patients at risk of ED revisits, hospitalisation or nursing home placement following ED discharge [17]. 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].

Geriatric interventions in the ED

Several studies have assessed whether geriatric interventions in EDs have an impact upon future outcomes of patients who are at risk of decline but do not actually require hospitalization [18, 23-27]. An Australian study [23] randomised 735 patients over 75 years to either a comprehensive geriatric assessment (CGA) or usual care following discharge from ED. The intervention group received home follow-up over 28 days by a hospital-based multidisciplinary outreach team. The intervention group had reduced rates of 30-day hospital readmission and ED admissions over 18 months, showed longer time to first ED admission and maintained greater levels of physical and mental functioning over the control group [23]. A 'before and after' Australian study [27] of a nurse-led model of risk screening and referral to community services in patients over 70 presenting to ED reduced the ED re-presentation and hospital length of stay but not hospital readmission [27]. A similar 'before and after' Australian study [28] implemented a multidisciplinary care coordination team in ED. The team saw 5.8% of all ED attendees and referred half of these patients home with community services. The rate of hospital admission fell significantly compared to the 12 months prior to implementation. A randomised study [29] looked at a two stage ED intervention on community dwelling American seniors after ED discharge. It used the TRST screening test to identify high-risk patients followed by a CGA by a geriatric advanced practice nurse. Control group participants received usual and

customary ED care. It showed reduced nursing home admissions at 30 days and improved patient satisfaction with ED care [29].

A Canadian randomised study used the ISAR [20] screening tool to identify at-risk older ED patients followed by a brief standardised geriatric nursing assessment and referral to an appropriate community provider. The intervention group had significantly reduced rates of functional decline from 30.9% to 21.1% at four months from the ED visit [25]. Neither of these studies showed reduced rates of ED utilisation in the intervention group.

Data from the Canadian study [25] regarding resource use and cost effectiveness of ED case finding, CGA and referral suggest the estimated societal costs were no higher than if usual care only were given [22].

A recent review article [30] summarizes the heterogenic research on CGA in ED. The authors conclude that hospital-based interventions had little overall effect on ED use, whereas outpatient and primary care-based interventions did tend to reduce ED use [30].

There is no doubt that case finding and liaison improves older patient care in the ED [28]. Care coordinator teams should now be a standard of care in Australian public hospital emergency departments.

Residential aged care facilities and the ED

Several American studies suggest that extended care facilities (synonymous with nursing homes in Australia) have high rates of ED presentations and hospitalisations [31, 32]. An Australian study [33] showed high rates of hospitalisation and re-presentation in 300 consecutive ED patients referred from residential care. Whether these referrals are 'avoidable' and can potentially be reduced by improved communication between ED and residential care facilities and increased health care resources has not been determined. Two studies [34, 35] on appropriateness of ED presentations by people living in residential care found most presentations were appropriate. These papers highlight the scope for improved reciprocal communication between residential aged care facilities and EDs. A simple data form for this information was successfully piloted in an American study [36] which improved communication between ED and extended care facilities.

Medication for seniors in EDs

Seniors are more likely to use prescription drugs than their juniors. Poly-pharmacy is identified as an independent risk factor for ED presentation [37-39]. Adverse drug reactions (ADR) occur frequently in older populations [40] due a multitude of factors: reduced drug metabolism and elimination, cognitive dysfunction and sight impairment limiting compliance. A high index of suspicion of ADR should be

considered in older ED patients. A Canadian study of 283 older patients (aged 65+) who visited ED determined the prevalence of poly-pharmacy, ADR and potential ADR [41]. The number of medications consumed averaged 4.2 per patient (SD \pm 3.1, range 0–17). ADRs accounted for 11% ED visits and 31% of patients had at least one potential ADR in the medications listed. [41].

Seniors are shown to be on inappropriate medication prior to an ED visit, receive potentially inappropriate drugs in the ED and be given potentially inappropriate drugs at ED discharge [6].

ED environment

The modern ED is not designed for frail seniors. The use of hard hospital trolleys and bed rail restraints, lack of pillows, high noise levels and long periods of separation from carers and family can have negative impacts on older patients. There is very little provision made for the wider care needs of older patients in ED such as pressure care support, mobility assistance and feeding assistance.

Whether changing the environment of EDs to suit older patients will affect outcomes has yet to be studied. An American 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 [42].

A novel facility exists in New South Wales named 'The Older Persons Evaluation, Review and Assessment Unit' (OPERA) [43]. The 10 bed unit has full time social work, physiotherapy, and medical and occupational therapy staff with twice daily consultant geriatrician ward rounds. Unpublished data has shown little change in older patient admissions but a significant reduction on ED access block from 40% to 10% [43].

In New South Wales, a service called 'Aged-care Services in the Emergency Team' (ASET) has been established to provide an aged care focus for the older population on presentation to ED [44]. The team comprises a range of health care professionals (occupational therapist, physiotherapist and social worker) led by a clinical nurse consultant. They assess and develop a care plan for older people as they come through the ED, whether admitted or discharged. Qualitative data on this and other similar services has yet to be published and further research is required.

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 [44]. A UK randomised controlled trial of a structured interdisciplinary assessment of ED fallers (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 [45]. A busy ED may not be the appropriate setting for a falls risk assessment. However it may be an appropriate place to screen and initiate referrals for ongoing management [27]. Using derived predictors of risk, staff can streamline referrals from ED to a dedicated falls service [46]. The risk factors identified include; a history of one fall or greater over 12 months, a fall indoors, being unable to get up from a fall and polypharmacy of four or more prescribed medications [46].

External influences on discharge decisions

Care of seniors in EDs should be seen in the wider context of changes in the healthcare system. The introduction of diagnosis-related group (DRG) funding has led to concern in those working in aged care that older people with conditions with low DRG weight or potentially long lengths of stay will be disadvantaged in their access to acute hospital beds. A shortage of acute hospital beds in many regions is a further consideration when deciding the discharge disposition older patients in ED. It is unrealistic to assume that the ED is immune to these external pressures in all cases, particularly when older people with chronic underlying disability rather than acute medical illness are the prime reason for hospital admission.

Summary

With Australia's ageing population, emergency departments will assume an increasingly important role in the practice of geriatrics both in the acute hospital and community setting.

Models of care for other special-needs patient groups have been established widely in EDs. Successful and established examples such as paediatric emergency centres, trauma centres, trauma teams, acute stroke teams and fast track acute coronary syndrome units provide efficient, effective, comprehensive and standardised care to their patients.

Novel and innovative models of care addressing the specialist needs of older people are needed to improve the outcomes of older patients in EDs. A more comprehensive and integrated model of emergency care for older people is required, linking primary care and improving exchange of information.

Aged care services should consider an increased role in the ED as an important priority and opportunity to favourably influence the care of older people in coming years. Continued collaboration, communication and education between the ED and geriatric medicine is paramount to develop an agenda for ongoing research, evidence-based policy and standard practice in the field of geriatric emergency medicine.

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