Statewide Older People Clinical Network

Level 6 Area Geriatric Service
Acute Care of the Elderly Unit
MODEL OF CARE

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TABLE OF CONTENTS

Acknowledgements

The Acute Care of the Elderly (ACE) Unit workgroup was convened in October 2011, as a workgroup of the Statewide Older People Clinical Network Steering Committee. The workgroup was formed to develop a Model of Care for ACE Units in Area Geriatric Services in South Australia.

Gary Anderson	CSC WARD 6C FMC
Emma Elix	Occupational Therapist LMHS
Erica Farrant	Social Worker TQEH (Oct 11 to April 2012)
Dr Jeff Faunt (Chair)	Head of General Medicine & Medical Unit 2 RAH
Louise Heuzenroeder	Network Development Manager Older People Clinical Network
Dr John Maddison	Medical Director Subacute Services NA-LHN
Angela May	Manager Service Integration, NA-LHN
Dr Yogesh Sharma	General Physician FMC
A/Prof Renuka Visvanathan	Director Aged & Extended Care Services TQEH
Dr Rochelle Whelan	Senior Clinical Neuropsychologist FMC
Natalie Williams	Acting Team Leader Acute Care of the Elderly Unit FMC

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Abbreviations

AAA	Acute Assessment Area
ACAT	Aged Care Assessment Team
ACE	Acute Care of the Elderly
AGS	Area Geriatric Service
AMU	Acute Medical Unit
CA-LHN	Central Adelaide Health Network
CGA	Comprehensive Geriatric Assessment
CHSA-HN	Country Health SA-Local Health Network
ED	Emergency Department
FMC	Flinders Medical Centre
FTE	Full Time Equivalent
GCLT	Geriatric Consultation Liaison Team
GEM	Geriatric Evaluation and Management Unit
GP	General Practitioner
LHN	Local Health Network
LMHS	Lyell McEwin Health Service
NA-LHN	Northern Adelaide Local Health Network
OPMHS	Older Persons Mental Health Services
RACF	Residential Aged Care Facility
RAH	Royal Adelaide Hospital
SADS	South Australian Dental Services
SA-LHN	Southern Adelaide Local Health Network
TCP	Transition Care Program
TQEH	The Queen Elizabeth Hospital

Disclaimer

This document has been developed by the Older People Clinical Network. The document is intended to be used to support the reform of health services within allocated budgets. The formation and development of Area Geriatric Services is considered optimal practice. It is expected the Local Health Networks will implement all recommendations that can be implemented without additional funding. It is the role of the Local Health Networks to determine which of the recommendations requiring the allocation of funding (from within the allocated LHN budget) they will implement and when. It is accepted, given the fixed allocation of funding, that there will be recommendations that may not be implemented within the timeframe to 2016. It is also accepted that optimal patient and system outcomes will not be achieved where Area Geriatric Services cannot be fully implemented.

Summary

The concept of an Acute Care of the Elderly unit was founded in the key policy document the Health Services Framework for Older People 2009-2016 [1] (*the Framework*). *The Framework* recommends that each of South Australia's major hospitals has an Acute Care of the Elderly unit.

The Acute Care of the Elderly unit model of care is proposed in response to the growing demand for acute overnight inpatient services by those aged 80 years and over and as a response to the increasing prevalence of people with dementia.

Acute Care of the Elderly units are designed, staffed and managed to meet the acute health needs of the most vulnerable older people and older people at risk of functional decline and poor outcomes as a result of hospitalisation, including those with dementia and delirium. Management and care of patients within an Acute Care of the Elderly unit is consistent with the model of care provided in a Geriatric Evaluation and Management Unit [2]. Acute Care of the Elderly units provide for high acuity care but restorative or rehabilitation care will be provided by transferring patients to a Geriatric Evaluation and Management Unit, Rehabilitation, Transition Care or equivalent service. The provision of care that defines an Acute Care of the Elderly unit includes Comprehensive Geriatric Assessment, care and management according to the needs of older people, consistent with the 12 Domains of the Care of Older People Toolkit [3], interdisciplinary meetings and well planned early discharge. There is strong evidence that the proposed Acute Care of the Elderly model of care produces better outcomes for acutely unwell older people.

The Acute Care of the Elderly unit is the acute inpatient component of an Area Geriatric Service [4]. The Acute Care of the Elderly unit will operate as a valuable component of the Area Geriatric Service when appropriate flow in and out of the unit is possible. This will be achieved in Local Health Networks that provide all components of the Level 6 (metropolitan) Area Geriatric Service and each component is fully resourced.

The following recommendations are made as a guide to the implementation of Acute Care of the Elderly units:

- The major hospital of each Local Health Network has a 20 to 24 bed Acute Care of the Elderly unit in operation by 2016.
- The Acute Care of the Elderly unit is operated under the governance of the Local Health Networks Area Geriatric Service.
- The staff of the Acute Care of the Elderly unit use the Acute Care of the Elderly model of care processes to guide referral, admission, management while in the unit and discharge.

- The Acute Care of the Elderly unit is resourced to support the delivery of the Future State Model of Care.
- The Acute Care of the Elderly leadership team monitor and evaluate the performance of the Acute Care of the Elderly unit, including teaching and research activities, and communicate this to staff of the Local Health Network.

1. Introduction

South Australia has an ageing population [5]. Older people are significant consumers of health services and older people have a higher risk of functional decline [6] and the development of geriatric syndromes when unwell and when in hospital [7]. Models of care for older people that avoid deconditioning and promote function are not systematically established within all of South Australia's hospitals. As a result, specialist units are required to provide this service.

An Acute Care of the Elderly (ACE) unit is designed to ensure vulnerable patients, who are most at risk of poor outcomes as a result of hospitalisation, receive specialist care while in hospital and leave hospital in the shortest possible time, with the highest level of function, independence and dignity that can be achieved.

The ACE unit is designed to provide for the acute health needs of frail and at risk older people; targeting those with delirium and dementia. An ACE unit provides a safe and appropriate environment; the service includes rapid identification for entry, rapid investigations and interventions for the person's acute illness, interdisciplinary geriatric assessment within 24 hours of admission to the unit, development of a care plan with interventions provided by the interdisciplinary team that promote independence to maintain optimal function, medication review, thorough discharge planning that includes referral to other services and information sharing.

The Health Services Framework for Older People 2009-2016 [1] (*The Framework*) proposes the formation of integrated Regional Older People's Health Services (referred to here as Area Geriatric Services) for each of the Local Health Networks (LHNs), with Level 6 AGSs in each of the three metropolitan LHNs. *The Framework* proposes an Older People's Acute Assessment Service (referred to here as an Acute Care of the Elderly unit) in each of the major hospitals of the metropolitan LHNs.

An AGS does not provide all health services to older people, an AGS provides specialist health care services by an interdisciplinary team, under the leadership of a geriatrician, that includes screening, comprehensive assessment and management to acute and subacute services within the AGSs and services into other non-AGS acute and subacute services through the AGS Geriatric Consultation Liaison Team. The AGS leads teaching, training and research in geriatric health [4].

2. Purpose

The purpose of this document is to describe current practice in each LHN, the evidence for the optimal ACE Unit model of care and the future state model of care, using the timeframes of *the Framework* [1].

3. Why reform current practice?

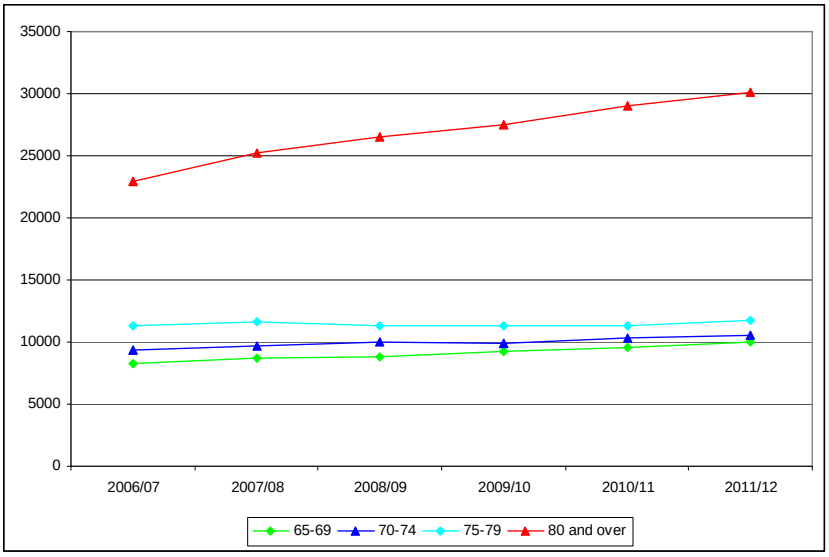
Current practice in the implementation of ACE units varies across the three major hospitals of the metropolitan LHNs, which may mean the consumer is advantaged or disadvantaged depending on where they are receiving their service.

The increasing demand for acute health services by those aged 80 years and over also strongly supports the need for reform.

3.1 Trends in admitted activity

The number of overnight separations for people in each of the age categories 65-69, 70-74, 75-79 years has remained consistent over the previous six years, but the number of overnight separations for people aged 80 years and over has increased each year [8] (Table 1).

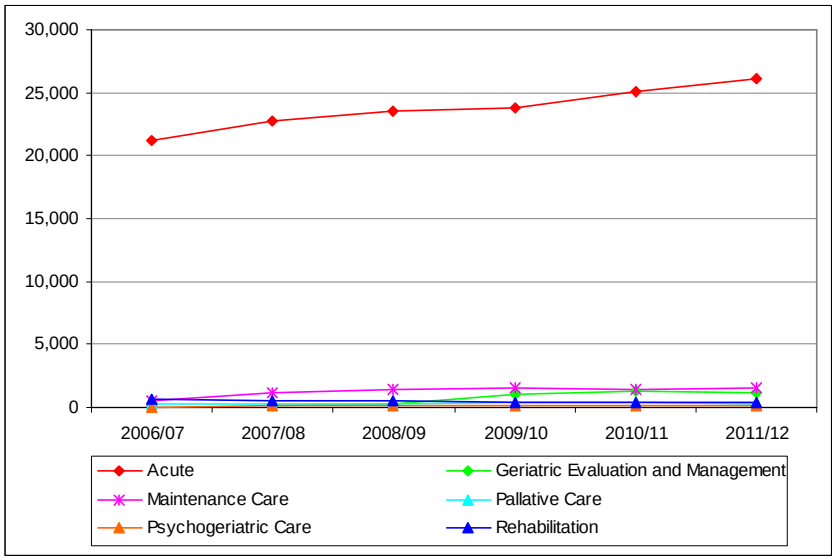
Table 1. Overnight separations for people aged 65 years and over in SA's major and general metropolitan hospitals (NHS RGH FMC MH LMHS RAH TQEH)



Source: ISAAC

For those aged 80 years and over the activity in overnight separations is predominantly for acute activity [8] (Table 2).

Table 2. Overnight separations by Episode of Care Type for people aged 80 years and older in SA's major and general metropolitan hospitals (NHS RGH FMC MH LMHS RAH TQEH)



Source: ISAAC

The ACE unit will provide an inpatient service for people with dementia who are acutely unwell. It is estimated that there were 26,500 people with dementia in South Australia in 2011 and this will increase by 26.7% to 33,500 people by 2020.

People with dementia are major users of hospital services, largely due to the fact that dementia is a chronic health condition which most commonly affects older people who are more likely to have other chronic health conditions [9].

A recent comprehensive NSW study of dementia care in hospitals found almost half of the episodes of people with dementia did not have dementia recorded as a either a principal or additional diagnosis [9].

The NSW study found that the average cost of hospital care for people with dementia was $7,720 compared with $5,010 per episode for those without dementia [9].

3.2 Description of an Area Geriatric Service

An AGS provides the clinical governance for all specialist older people's health services within an LHN. Each AGS is responsible for measuring and managing their budget, clinical, service, teaching and research performance.

To aid in the description of an AGS, a conceptual model of a Level 6 (metropolitan) AGS is presented in Figure 1. The conceptual model reflects AGS acute services (coded red), subacute services (coded orange) and community services (coded green). For an AGS to function there needs to be some dedicated acute service, more subacute than acute services and substantial capacity in community based services.

The conceptual model illustrates how older people who are living in the community, at home with community support or in residential aged care, connect though their General Practitioner (GP) (or other service provider) to access specialist community, subacute or acute inpatient AGSs.

Each AGS should have an identifiable point of access, with a single contact number, based at the AGS's 'hub' within the LHN's general hospital, and resourced by the Geriatric Consultation Liaison Team (GCLT). The role of the GCLT is to improve access for those referring older people to specialist geriatric services; actively screen older people in the Emergency Department and non AGS units to determine their need for AGSs, provide consultation out to patients who are not in specialist geriatric inpatient units; arrange admission for older people into specialist geriatric inpatient units (GEM and ACE); and connect older people into community based specialist geriatric services (Transition Care Program, Maintenance, Case Management, Community Outreach and Community Outpatient Services).

As depicted in the conceptual model (Figure 1), the AGS works closely with Rehabilitation, Palliative Care, Older Persons Mental Health Services and the South Australian Dental Service.

The AGS works closely with non-AGS community based services and Residential Aged Care providers to collaborate in the provision of care and connect in the transition of care.

Mostly older people's interaction with the AGS will be intermittent, and their interaction with primary health care, through their GP, and community care, possibly through a Home Care package[10] or other community services, will be ongoing. The AGS collaborates with the GP during the intermittent episodes of AGS involvement, and the GP, as the central point of co-ordination of care, maintains the collaboration with the community service provider(s). In the absence of a GP, the AGS collaborates with the community service provider(s).

The AGS is described slightly differently for Country Health-SA, but both Level 6 AGSs (metro) and Level 4 AGSs (country) have an access point through which referrals and communication can take place [4].

To understand the component parts of an Area Geriatric Service in greater detail, this document should be read in conjunction with:

- Description of an Area Geriatric Service [4]
- Geriatric Evaluation & Management Unit Model of Care [2]
- Geriatric Consultation and Liaison Team Model of Care [11]
- Community Geriatric Services Model of Care [12]

3.3 Role of ACE in the context of an AGS

There is strong evidence that older people are at risk of de-conditioning and irreversible functional decline as a result of immobility and bed rest while in hospital [6] [7]. In addition, there are many older people who experience delirium, who have dementia and other complex health problems who, when admitted to hospital, require admission to a specialist geriatric unit.

An AGS with access to AGS governed acute inpatient beds (an ACE unit) can manage the timely admission of older people directly from the community, through the Geriatric Consultation Liaison Team Point of Contact, into a hospital bed where they can receive immediate specialist treatment. In addition, older people with acute health needs in general wards can be referred to the AGS for transfer to an ACE bed, where they can receive specialist treatment. The older person who is moved or referred quickly into specialist geriatric services has less opportunity to experience avoidable functional decline.

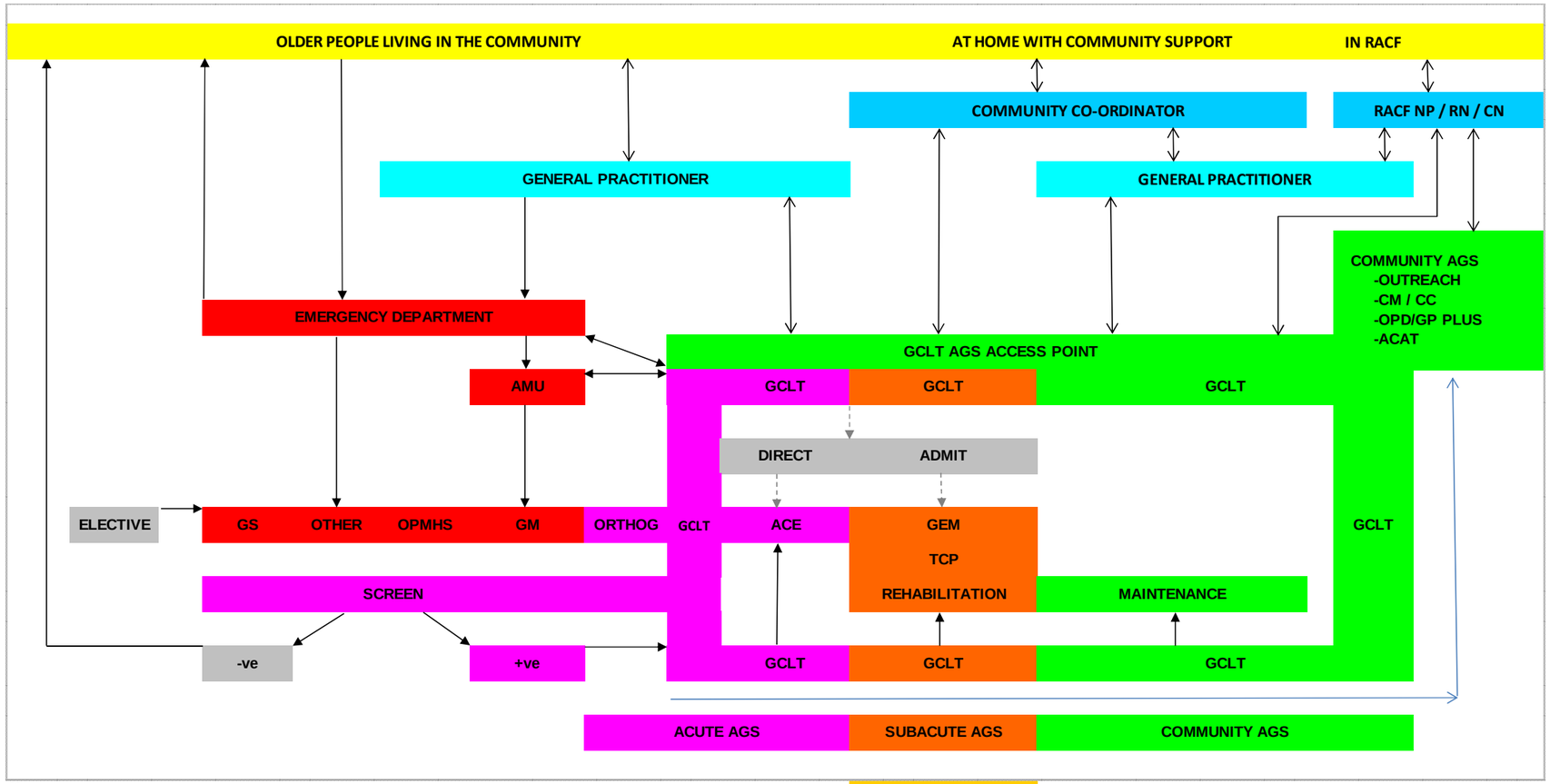
To ensure access in to an ACE unit, there needs to be flow through the ACE unit. The ACE Unit needs to be supported by an AGS that includes each component of the AGSs and each component of the service is required to be fully resourced. For an ACE unit this means having access to GEM Unit beds, Transition Care Program places, Rehabilitation beds, Maintenance beds, community based outreach and outpatient department services. The distribution of resources across the AGS must recognise the need for capacity in community, subacute and acute components of the service. The role of the ACE unit, in the context of an AGS, is depicted in the AGS conceptual model in Figure 1.

The conceptual model reflects acute services in red, subacute in orange and community services in green. For an AGS to function, there needs to be some dedicated acute service (coded red), more subacute than acute services (coded orange) and substantial capacity in community based services (coded green).

3.4 ACE and GEM

An ACE unit is operated on the same principles as a GEM unit (described in the GEM Model of Care)[2]. An ACE Unit provides for high acuity care, but restorative or rehabilitation care will be provided by transferring patients to a GEM Unit, Rehabilitation, Transition Care or equivalent service. By 2016, there will be an ACE unit in the major hospital and a GEM unit in the general hospital of each of SA's metropolitan LHNs [1].

Figure 1. Conceptual Model of a Level 6 Area Geriatric Service



Key:
ACAT: Aged Care Assessment Team
ACE: Acute Care of the Elderly Unit
AGS: Area Geriatric Service
AMU: Acute Medical Unit
Clinical Nurse
CM/CC: Case Management / Care Co-ordination
GCLT: Getriatric Consultation Liaison Team (includes Access Point)
GEM: Geriatric Evaluation and Management
GM: General Medicine
GS: General Surgery
GP+: GP Plus Clinics
NP: Nurse Practitioner
OPD: Outpatient Department
OPMHS: Older People Mental Health Service
ORTHOG: Orthogeriatrics
OTHER: Refers to all other clinical units patients might be admitted under
RACF: Residential Aged Care Facility
RN: Registered Nurse
SADS: South Australian Dental Service

4. Current State Model of Care

Consistent with *The Framework* [1], each major hospital (Flinders Medical Centre FMC), the Royal Adelaide Hospital (RAH), Lyell McEwin Health Service (LMHS)) requires an ACE unit. The current state role and function of ACE units varies across the three major hospitals.

4.1 SA-LHN

The only one of South Australia's three major hospitals with an ACE unit is the FMC.

The ACE unit is located within ward 6C, sharing facilities and staff with a general medical ward and with outliers on other wards within FMC. The ACE unit has access to approximately 16 of the total 24 beds on the ward. These are not geographically identified on the ward, but any 16 of the 24 beds. The environment of the ward has not been able to be modified (due to the inability to fund such changes). The ward has swipe card entry and intercom access and a green button exit near the doors.

Patients are triaged for management by ACE according to the following criteria:

- High priority patients: a) patients with significant age related cognitive impairment (not from High Level Care) b) patients with behavioural & psychological symptoms of dementia (may be from High Level Care)
- Medium priority patients: GEM type patients (those patients who may not have a) or b) but are likely to benefit from interdisciplinary care and functional maintenance)
- Low priority patients: Other patients aged 65+ (eg those from High Level Care with no behavioural & psychological symptoms of dementia).
- Load levelling is required at times to aid general medical units.

Patients within the ACE unit are admitted under the care of the consultant geriatrician.

Given the evidence for comprehensive geriatric assessment, therapy to prevent functional decline, and complex discharge planning, the ACE model allows for higher levels of experienced allied health staff. Allied Health team members are AHP2/3 with a special interest in the care of older people. Nursing staff comprises a skilled team of nurses using a Team Nursing Model of care.

The ACE Model supports a strong interdisciplinary team with comprehensive discharge planning to facilitate good patient outcomes and reduce readmission rates [13]. The FMC ACE Team including all ACE medical staff, all allied health staff and senior nursing representatives from 6C attend twice weekly discharge planning meetings. On weekdays when no discharge planning meeting is held the majority of the team attend a brief morning meeting to provide and receive updates for all ACE patients.

4.2 CA-LHN

The RAH has a Geriatric Medicine unit within Ward S8, sharing facilities with a general medical ward. The Geriatric Medicine unit has access to 12 beds (six bed bays or side rooms) of the 28 beds in S8. Patients in these 12 beds are under the bed card of a Consultant Geriatrician. Medical, nursing, physiotherapy, occupational therapy and social work staff are assigned specifically to the 12 bed Geriatric Medicine unit. The medical and allied health staff also manage the care of patients who are outliers to the unit.

The ward environment has not been modified in any specific way to accommodate the needs of the older patients. The ward is secure with key code entry and exit.

Patients are admitted to the Geriatric Medicine unit by Geriatric Department Consultants, the Geriatrics Registrar or the admitting General Medical team. The unit takes older people with complex medical problems and/or multiple co-morbidities including:

- Confusional states / delirium;
- Dementia or behavioural problems;
- Falls.

General Practitioners can refer patients to the Geriatrics Consultants or admitting General Medicine team to arrange for direct admission from the community.

Patients can be directly readmitted if they have had a previous admission to the Geriatric Medicine unit ward or the Hampstead Respite Unit.

Patients are discharged from the Geriatric Medicine unit to home +/- supports, rehabilitation or residential care.

In the short term (early 2013) the existing General Medicine teams will likely be reconfigured into:

- Acute Medicine beds (short stay)
- Expected Care beds (medium stay)
- Longer Stay beds (longer stay but actively streamed to appropriate location). A number of beds will be designated for patients with delirium and behavioral disturbance). The existing 12 acute geriatric beds will be co-located with the Longer Stay general medicine beds.

4.3 NA-LHN

As of January 2013, there is no ACE unit at the Lyell McEwin Health Service (LMHS). The NA-LHN NAGS (Northern Area Geriatrics Service) is currently providing an in-reach

acute geriatrics service at LMH. Discussions are ongoing with regard to the possibility an inpatient acute geriatrics unit at LMH. There is a potential role for a 6-8 bed acute geriatrics unit at LMH as a mandatory element of a level 6 area geriatrics service.

Access to the unit would be managed by a geriatrician and in practice would be achieved through daily liaison with general medicine and other speciality units at the LMHS. It would be possible for patients to be directly admitted from the community into the unit. The service would focus on older patients from the NA-LHN who are acutely unwell, who are not suitable for GEM or other geriatric services. The acute geriatrics unit would provide short term, high acuity care for older people including diagnosis, comprehensive assessment and restorative focused interventions. Once the patient's acute illness was sufficiently resolved, they would be transferred to GEM, which would improve the flow of patients into GEM; or referred to other appropriate services.

5. Evidence to support change

5.1 Policy

The Framework [1] describes the requirement for major hospitals to have older people's Acute Assessment Services (referred to here as ACE units) to "provide acutely unwell older people with comprehensive assessment and restorative focussed interventions, where services are provided by multidisciplinary teams experienced in the assessment and management of geriatric syndromes" (p.18).

"Older people's Acute Assessment Services:

- Are staffed by multidisciplinary teams with specialist skills and expertise
- Have dedicated access to diagnostics, intensive care, coronary care and high dependency services
- Provide minor, immediate, major diagnostic and treatment procedures in association with other specialities
- Provide in-reach consultancy and liaison to other specialties
- Support advanced training for all contributing disciplines
- Are linked to units in General Hospitals, mobile outreach ambulatory and specialist rehabilitation programs and services, and
- Are linked to specialist community services providing support and assistance with memory, mobility and continence.
- These services will have the capacity to admit older people directly from the community, in instances where their care needs cannot be appropriately managed in the home or community setting, as well as those identified by Older

People's Health Teams operating in the setting of the emergency department" (p.18).

5.2 Literature

The highest level of evidence for an acute geriatric unit is found in a meta-analysis published by Baztán J et al in 2009 [14], which included 11 studies (5 randomised trials, 4 non randomized, 2 case control studies). The randomized trials showed that compared with older people admitted to conventional care units those admitted to acute geriatric units had a lower risk of functional decline at discharge (combined odds ratio of 0.82, 95%CI 0.68 to 0.99) and were more likely to live at home after discharge (1.30, 1.11 to 1.52), with no difference in case fatality (0.83, 0.60 to 1.14). The global analysis of all studies, including non randomized trials, showed similar results.

Baztán's meta-analysis identified four features of the acute geriatric units that were common across the studies: 1. comprehensive geriatric assessment of patients, 2. use of standardised instruments for measurements, 3. weekly interdisciplinary meetings and 4. early discharge of patients. The team composed of at least one geriatrician, nursing staff trained in geriatrics, a social worker and therapists. The studies included patients of all casemix types and all were aged over 70 years.

6. Future State Model of Care

The future state describes the agreed model of care for an ACE unit, based on policy, evidence published in the literature and expert recommendations from the working group.

6.1 Optimal size of an ACE unit

The literature and experience indicates that 20 to 24 beds is the optimal operational size for an ACE unit [15]. It is proposed that each Level 6 AGS has a 20 to 24 bed ACE unit implemented by 2016. The monitoring and evaluation of the short to medium term impact and longer term outcomes for patients and on the operational efficiency of the hospital system will determine whether to expand ACE units beyond this capacity, over time.

Each 20 to 24 bed unit requires the ability to flex up to 8 beds into a designated high level observation area.

6.2 Physical environment of the ACE unit

An ACE unit is physically separate ward or unit with dedicated beds. There is long established evidence that the model of care is adhered to and maintained, and so the effect sustained, due to the geographical grouping of patients in the same specialist unit [16].

The ACE unit should be able to be made secure, including an area for 'high observation and care' within the unit. As a minimum, the unit should have natural light, high–low beds, bedside chairs, appropriate floor covering, en-suite bathrooms, access to outdoor areas from both high care and low care, shatter proof glass, visual contrast to aid way-finding, appropriate signage, wall clocks and calendars.

Optimally the unit will have the ability to accommodate a carer or family member to stay overnight, if they choose to do so. Noting that an acute admission is the opportunity for respite for many carers and family members, which is important preparation for discharge planning.

Adequate office and meeting room space to conduct assessment and counselling and support teaching, training and research.

6.3 Target Population for an ACE unit

If the entry criteria for admission to an ACE unit were broad, then demand would significantly exceed supply and referrers would quickly become frustrated at the inability of the unit to respond to their request to admit patients. Within the limitations of a 20 to 24 bed unit, it is necessary to more narrowly define the target population. The target population has been determined as the group who most urgently needs access to a specialist acute inpatient geriatric led unit and for whom the greatest gap in specialist services currently exists.

The target population is detailed by priority to explain how access to ACE beds should be determined when demand for services exceeds supply of beds available. The target population, in order of priority, includes:

A. Patients referred by a geriatrician from any part of an Area Geriatric Service. These patients are identified as people 80 years and over, with an acute illness who are, without access to specialist acute inpatient geriatric services, at high risk of irreversible functional decline.

Or

B. Patients 65 years and older (younger people considered on a case by case basis), with priority for those aged 80 and older, and 50 years and older for Aboriginal people, who:

- have an acute illness and
- have behavioural and psychosocial symptoms of dementia, or
- have delirium as a result of dementia, or
- have delirium as a result of an acute illness, or

Or

C. Patients identified as being GEM unit eligible but are awaiting transfer to an inpatient GEM unit at a general hospital.

A major hospital with adequate ACE beds will accept patients from categories A, B and C.

Patients excluded from admission to the ACE unit are all those who do not fit into the target population, but specific exclusions include patients who:

- Have delirium or behavioural symptoms related to current or past drug and alcohol consumption
- Have delirium or behavioural symptoms with a background of current or past traumatic brain injury.
- Have an acute illness where the patient's needs are better met in an acute medical or surgical unit.

6.4 Streaming of patients within an ACE unit

Patients within the target population can vary considerably in their care needs and the environment they require for the delivery of safe and appropriate care. Consistent with the design of an aged acute mental health unit, there is a need within an ACE unit to identify patients in need of higher level of observation and care. These patients require a greater proportion of staff to manage their needs safely and appropriately.

The ability to identify and allocate patients to a higher level of observation and care within an ACE unit (the High Level Observation and Care Unit), allows the ACE unit leadership team to determine, at any given time, the appropriate proportion of higher and lower level of observation and care patients that should be in the unit to support a safe and functional ward environment.

The criteria for admission to ACE High Level Observation and Care Unit:

- Patients with behaviours of concern that substantially impact on their ability to receive necessary nursing and/or medical interventions;
- Patients from residential aged care facilities with behaviours of concern which prevent their return to the original or an alternative place of residence;
- Patients with behaviours of concern requiring residential care placement, for whom it is currently inappropriate to commence the placement process;
- Patients with cognitive impairment who repeatedly attempt to abscond or have successfully absconded during this admission (does not include patients who repeatedly say they want to leave); and/or

- Patients for whom segregation from other patients will reduce behaviours of concern (where behaviours of concern are impacting upon necessary nursing/ allied health interventions or the placement process).

The aim for higher level of observation and care ACE patients is to stabilise behaviours and then for the patient to enter the general ACE environment to enable safe discharge.

6.5 Identification of patients for ACE unit admission

The objective of the process is to identify and transfer the patient as quickly as possible to the ACE unit, so as to avoid unnecessary movement between wards and unnecessary delays to the older person receiving specialist care.

An AGS is designed to promote direct admission of older people into the appropriate level of specialist geriatric service they require. Where an older person's care needs require admission to an ACE unit, the person could be referred by their GP to the AGS through the Geriatric Consultation Liaison Team (GCLT) Point of Contact. The GCLT Point of Contact could arrange for an urgent review of the patient and then assist in the direct admission of the person to the ACE unit, and so avoid an unnecessary emergency department presentation and unnecessary admission to the Acute Medical Unit (AMU).

The preferred method of admission is direct from community to ACE, but there may be times when the geriatrician will refer the patient to the Emergency Department (ED) or the AMU for admission and further investigations.

For patients admitted through the emergency department, the ED doctor can contact the AGS GCLT to make a request for consultation. When there are ACE beds available, the Geriatrician can directly admit the patient to the ACE unit from the ED.

A screening process of older people in units with a high prevalence of frail older people (e.g., orthopaedics, acute medical units) is undertaken by the GCLT to identify people who will benefit from access to specialist geriatric services. The GCLT also accepts referrals from all other hospital medical teams. The Geriatrician may recommend transfer of the patient to the ACE unit. For all referrals to the ACE unit, the final decision on admission is at the discretion of the duty Geriatrician who will also advise on priority for transfer, based on patient need.

6.6 Care within the ACE unit

The evidence for the effectiveness of ACE units is based on four features of the unit's model of care (Baztán et al 2009). Underpinning the model, is care provided according to the 10 principles of Dignity in Care [17].

6.6.1 Comprehensive Geriatric Assessment (CGA), is defined as 'a multidimensional, interdisciplinary diagnostic process to determine the medical, psychological and functional capabilities of a frail older person in order to develop a coordinated and

integrated plan for treatment and long term follow up' [18]. It seeks to ensure that problems are identified, quantified and managed appropriately [19].

In South Australia, reference to *The Toolkit* [3], is used to guide implementation of strategies to address problems identified by the CGA. The interdisciplinary team is responsible for implementation of these interventions.

The Toolkit has 12 domains, the essence of the relevance of the domain is summarised:

Domain 1. Person-centred practice, which means people can:

- Receive care and treatment that accords with their values, goals and beliefs.
- Participate in all decision making process, to the extent they wish to, and are able to, and involve those important to them in the process.
- Be supported to express their wishes, including consent or refusal of treatment, even in advance, if they want to, dependent on their level of decision making capacity.
- Avoid unwanted treatment. This may be documented in an Anticipatory Direction [20].
- Appoint a substitute decision maker if they wish to, and are competent to do so, through a Medical Power of Attorney or an Enduring Power of Guardianship [21,22].
- Have their wishes for future treatment known across the health and broader community sectors and receive care according to their documented Advance Care Plan.

A Bill that makes it easier for people to express their wishes and leave instructions about their care if their decision-making abilities are temporarily or permanently impaired passed the Parliament of South Australia in April 2013. The *Advance Care Directives Bill 2013* [23] enables competent adults to appoint and instruct one or more Substitute Decision-Makers and replaces the Enduring Power of Guardianship, Medical Power of Attorney and Anticipatory Direction forms. Protections are also offered under the new legislation for health practitioners and decision-makers acting on a person's Advance Care Directive. These changes are expected to come into effect in early 2014.

Domain 2. Assessment – initial assessment by the interdisciplinary team members within 24 hours, ACAT within 48 hours of request. Components of the assessment include the Toolkit domains: 3. Mobility, vigour and self care, 4. Nutrition, 5. Cognition, 6.Delirium, 7. Dementia, 8. Depression, 9. continence, 10. Medication, 11. Skin integrity and 12. Oral health.

Domain 3. Mobility, vigour and self-care – encourage mobilisation, screen, assess, supervise those at risk of falls.

Domain 4. Nutrition –encouragement and support to eat and drink, and to sit out of bed for meals.

Domain 5. Cognition – (and **Domain 6** Delirium, **Domain 7**. Dementia and **Domain 8.** Depression) and includes implementation of behavioural strategies including reorientation, establishment of routines, regular individual and group activities and an environment conducive to a good night's sleep.

Domain 9. Continence – encourage use of toilet; discourage unnecessary use of bedpan/commode, and avoid unnecessary use of indwelling catheter.

Domain 10. Medication – pharmacy review, protocols for prescribing analgesics, management of constipation. Practice according to the Australian Pharmaceutical Advisory Council guidelines [24].

Domain 11. Skin Integrity - Maintaining skin integrity is important because hospital-acquired pressure areas, skin tears and infections are associated with pain, reduced mobility, increased risk of in-hospital complications and increased health care costs due to a prolonged length of stay.

Domain 12. Oral Health – oral disease impacts on health and the quality of other areas of life.

6.6.2 The use of standardised instruments for measurements

In South Australia, reference to *The Toolkit* [3] is used to identify standardised instruments for use in measuring patient outcomes within the ACE unit.

6.6.3 Brief daily interdisciplinary meetings

The purpose of the meeting is to discuss patient progress against the care plan, determined by the findings of the CGA, and implemented according to the needs of the older person, consistent with the 12 Domains of *The Toolkit* [3].

6.6.4 Twice weekly interdisciplinary meetings

The purpose of the meeting is to discuss patient progress against the care plan, determined by the findings of the assessment, and implemented according to the needs of the older person, consistent with the 12 Domains of *The Toolkit* and to discuss the discharge plan.

Discharge planning begins on admission to the ACE unit, is comprehensive, considers all of the problems identified in the Comprehensive Geriatric Assessment and relies on the availability of resources in the GEM unit, Geriatric Evaluation and Management community services, Transition Care Program, Community Geriatric Services and home and community based services.

6.6.5 Care is provided according to the 10 Principles of Dignity in Care [17]

- Zero tolerance of all forms of abuse.
- Support people with the same respect you would want for yourself or a member of your family.
- Treat each person as an individual by offering a personalised service
- Enable people to maintain the maximum possible level of independence, choice and control.
- Listen and support people to express their needs and wants.
- Respect people's privacy.
- Ensure people feel able to complain without fear of retribution.
- Engage with family members and carers as care partners.
- Assist people to maintain confidence and a positive self-esteem.
- Act to alleviate people's loneliness and isolation.

It is the provision of this Model of Care that defines an ACE unit and enables it to deliver better patient outcomes that support independence, rapid recovery and dignity.

6.7 Flow of patients through an ACE unit

To maximize access to appropriate care for older people, once the patient is medically stable, and identified by the ACE team as for 'maintenance care', the patient should be moved out of the ACE unit, where management outside of the ACE unit is possible. Patients who no longer have an acute illness, but require ongoing care to regain function and independence, and who meet the GEM unit entry criteria, should be transferred to the GEM unit.

ACE patients require priority access to GEM. To maintain flow, GEM patients require priority access services including: the Transition Care Program (residential and community), Rehabilitation In The Home, respite in Residential Aged Care Facilities, community aged care services, palliative care services and inpatient and community psychogeriatric services.

The flow of patients through an ACE unit requires the repatriation of rural patients back to a CHSA-LHN facility or service, including GEM where required, as soon as it is appropriate. It also requires the development and maintenance of strong relationships with community and residential aged care services and the Dementia Behaviour Management Advisory Service (Alzheimer's Australia – SA).

6.8 The ACE unit Team

In order to provide patients with services according to the 12 Domains of *The Toolkit* [3], the ACE Team requires a slightly higher level of allied health staff. The investment in staff returns greater efficiency, gained through reduced length of stay, and improved patient outcomes, gained from the maintenance of independence and dignity.

Within the ACE unit, patients are admitted under the bed card of a geriatrician. The ACE unit is staffed by a geriatrician led interdisciplinary team, which includes:

- Consultant Geriatricians
- Trainee Medical Officers
- Nursing as nursing hours per patient day. The nursing staffing standard to be agreed in accordance with the Nursing & Midwifery SA Public Sector Enterprise Agreement 2010.
- Clinical Practice Consultant
- Social workers
- Occupational Therapists
- Physiotherapists and Allied Health Assistant
- Dietician
- Speech pathologist
- Pharmacist
- Ward clerk
- Access to an Area Geriatric Service Clinical Neuropsychologist
- Access to an Area Geriatric Service Clinical Psychologist
- Access to a Diversional Therapist
- Access to an Audiologist
- Access to a Podiatrist
- Access to Dental Care (through SADS or private dental services)
- Access to Pastoral Care

In the short term it is considered desirable for all clinical staff to have higher level qualifications in the care of older people; within 5 to 10 years it will be an expectation.

Implementation of ACE staffing levels requires discussion and agreement between SA Health and the key industrial groups.

Each ACE team would work with the LHN to identify opportunities to involve volunteers in the activity of the unit.

7. Monitoring and reporting

The ACE unit leadership team will monitor and report to staff, managers and executive on:

7.1 Patient outcomes

- Patient/carer compliments and complaints
- Adverse events (Target = 0)
- Code Black/MET calls
- Unplanned readmissions (7 days, 28 days and 3 months)
- Mortality
- Relative Stay Index
- Falls rate benchmarked against similar geriatric units
- Number of patients living at home 12 months post discharge

7.2 Access

- Waiting time for entry into ACE
- Admission type: direct from community, from ED, AMU, other ward, and length of time in ward/department prior to admission to ACE

7.3 Flow

- ACE unit occupancy
- Day of admission and day of discharge (7 day service)
- Length of stay in ED prior to admission directly to ACE
- Length of stay in ACE
- Total Length of total hospital stay (Target is ALOS 6 days)
- Length of wait from referral to other speciality to review by other specialty
- Length of wait from accepted by other speciality to transfer to speciality unit (ie HDU/ICU/Surgery)
- Length of stay between referral to, assessment by and discharge to other services (e.g., ACAT, rehabilitation, psychogeriatrics, palliative care etc.)

- Discharge destination
- Interim discharge summary on discharge, geriatrician reviewed final discharge summary within 7 days of discharge

7.4 Resources

- Number of hours of nurse 'specials' or security guard
- Actual team resources against optimal team resources

7.5 Other

- Staff comment / complaints / compliments

8. Teaching and research

The ACE leadership team, under the governance of the AGS, will identify:

- The teaching program within and beyond the ACE unit
- High priority areas for research

9. Recommendations

The following recommendations are made as a guide to the implementation of ACE units:

- The major hospital of each LHN has a 20 to 24 bed ACE unit in operation by 2016.
- The ACE unit is operated under the governance of the LHNs Area Geriatric Service.
- The staff of the ACE unit use the ACE model of care processes to guide referral, admission, management while in the unit and discharge.
- The Acute Care of the Elderly unit is resources to support the delivery of the Future State Model of Care.
- The ACE leadership team monitor and evaluate the performance of the ACE unit, including teaching and research activities, and communicate this to staff of the LHN.

References

1. Government of South Australia, Statewide Service Strategy Division. Health Service Framework for Older People 2009-2016. (2009).
2. South Australian Department of Health and Ageing, Older People Clinical Network. Geriatric Evaluation and Management Model of Care. (in draft, 2013).
3. South Australian Department of Health and Ageing. Care of Older People Toolkit (2012).
4. South Australian Department of Health and Ageing, Older People Clinical Network. Description of an Area Geriatric Service. (in draft, 2013).
5. Government of South Australia, Department of Planning and Local Government. Population Projections for South Australia and Statistical Divisions 2006–36. (2010).
6. Creditor, M.C. Hazards of hospitalization of the elderly. Annals of Internal Medicine 118, 219-223 (1993).
7. Hirsch, C.H., Sommers, L., Olsen, A., Mullen, L. & Winograd, C.H. The natural history of functional morbidity in hospitalized older patients. Journal of the American Geriatrics Society 38, 1296-1303 (1990).
8. Government of South Australia, SA Health. ISAAC - The Integrated South Australian Activity Collection.
9. Australian Institute of Health and Welfare. Dementia care in hospitals: costs and strategies. Vol. Cat. no. AGE 72 (Canberra, 2013).
10. Australian Government. Living Longer. Living Better. Aged Care Reform Package. (2012).
11. South Australian Department of Health and Ageing, Older People Clinical Network. Geriatric Consultation Liaison Team Model of Care. (in draft, 2013).
12. South Australian Department of Health and Ageing, Older People Clinical Network. Community Geriatric Services. (in draft, 2013).
13. Naylor, M., et al. Comprehensive Discharge Planning for the Hospitalized Elderly: A Randomized Clinical Trial. Annuals of Internal Medicine 120, 999-1006 (1994).
14. Baztán, J.J., Suárez-García, F.M., López-Arrieta, J., Rodríguez-Mañas, L. & Rodríguez-Artalejo, F. Effectiveness of acute geriatric units on functional decline, living at home, and case fatality among older patients admitted to hospital for acute medical disorders: meta-analysis. British Medical Journal 338(2009).
15. NSW Health, Clinical Services Redesign Program. Acute Care of the Elderly. (2006).
16. Moodie, M., et al. Economic evaluation of Australian stroke services: a prospective, multicenter study comparing dedicated stroke units with other care modalities. Stroke 37, 2790-2795 (2006).
17. Government of South Australia, Department for Health and Ageing,, The Queen Elizabeth Hospital. Dignity in Care Pamphlet. (2012).
18. Rubenstien, L.Z., Stuck, A.E., Sui, A.L. & Wieland, D. Impact of geriatric evaluation and management programs on defined outcomes: overview of the evidence. Journal of the American Geriatrics Society 39, 8-16S (1991).

19. Ellis, G., Whitehead, M., Robinson, D., O'Neill, D. & Langhorne, P. Comprehensive geriatric assessment for older adults admitted to hospital: meta-analysis of randomised controlled trials. British Medical Journal 343(2011).
20. Government of South Australia. A Guide for those completing an Anticipatory Direction.
21. Government of South Australia. Guardianship and Administration Act (1993).
22. Government of South Australia. Consent to Medical Treatment and Palliative Care Act (1995).
23. Government of South Australia, Attorney-General's Department,,. Advanced Care Directives Bill 2013.
24. Australian Pharmaceutical Advisory Council. Guiding principles to achieve continuity in medication management. (July 2005).