

Statewide Older People Clinical Network

Level 6 Area Geriatric Service Geriatric Evaluation and Management Unit MODEL OF CARE

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Government
of South Australia

SA Health

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In 2013, the Model of Care was revised under the direction of the Network's Steering Committee.

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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
ATSI	Aboriginal and Torres Strait Islander
BPSD	Behavioural & psychological symptoms of dementia
CA-LHN	Central Adelaide Local Health Network
CGA	Comprehensive Geriatric Assessment
CHSA-HN	Country Health South Australia –Health Network
ED	Emergency Department
FMC	Flinders Medical Centre
FTE	Full Time Equivalent
GCLT	Geriatric Consultation Liaison Team
GEM	Geriatric Evaluation and Management
GP	General Practitioner
LHN	Local Health Network
LMHS	Lyell McEwin Health Service
MH	Modbury Hospital
NA-LHN	Northern Adelaide Local Health Network
NGO	Non Government Organisation
OPMHS	Older Persons Mental Health Services
RACF	Residential Aged Care Facility
RAH	Royal Adelaide Hospital
RGH	Repatriation General Hospital
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 key policy document, the Health Services Framework for Older People 2009-2016 ¹ recommends that each of South Australia's general hospitals (Repatriation General Hospital, The Queen Elizabeth Hospital and Modbury Hospital) has an Older People's Acute Assessment and Management Unit (referred to here as Geriatric Evaluation and Management units).

South Australia has an ageing population ². More frail older people with multiple morbidities are being admitted to hospital with acute health problems. There is strong evidence in the literature that older people are at risk of de-conditioning and irreversible functional decline as a result of immobility when in hospital ³.

The role of the Geriatric Evaluation and Management unit is to provide restorative and rehabilitation services to older people, even when they are still in the acute phase of their illness, to promote movement and independence in activities of daily living that helps to retain function and reduce decline resulting in premature admission to residential aged care facilities.

Increasing the period older people are living independently, and so reducing the time older people spend in residential aged care facilities, is overwhelmingly what older people want and is consistent with the Australian Government's Living Longer Living Better strategy ⁴. It is also the most cost effective way of providing health services; achieving the best outcomes at the lowest cost ¹.

The provision of care that defines a Geriatric Evaluation and Management 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 ⁵, interdisciplinary meetings and well planned early discharge.

The Geriatric Evaluation and Management unit is the subacute inpatient component of an Area Geriatric Service ⁶. The Geriatric Evaluation and Management 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) AGS and each component is fully resourced. Geriatric Evaluation and Management services provided across Country Health SA are described separately in the document Country GEM Model of Care ⁷.

The following recommendations are made as a guide to the implementation of Level 6 Area Geriatric Service Geriatric Evaluation and Management units:

- Each Local Health Network has the appropriate ratio of acute beds to subacute beds, including Geriatric Evaluation and Management, and that the number of Geriatric Evaluation and Management beds required are operational by 2016;
- The Department of Health and Ageing works with the Local Health Networks and the Older People Clinical Network to determine the balance of acute to subacute beds.

- The Geriatric Evaluation and Management unit infrastructure complies with the requirements of the National Ageing Research Institute's Improving the Environment for Older People in Health Services -An Audit Tool ⁸;
- The Geriatric Evaluation and Management unit is resourced to support the delivery of the Future State Model of Care;
- The Geriatric Evaluation and Management unit operates as a component of the LHN's Area Geriatric Service, particularly as it relates to the Geriatric Consultation Liaison Team;
- The staff of the Geriatric Evaluation and Management unit use the Geriatric Evaluation and Management Model of Care to guide processes for referral, admission, management and discharge;
- The Geriatric Evaluation and Management leadership team plans and participates in a program of education, training and research, undertaken within the context of the Area Geriatric Services;
- The Geriatric Evaluation and Management leadership team monitor and evaluate the performance of the GEM unit, including teaching and research activities, and communicate this to staff of the Local Health Networks; and
- The Geriatric Evaluation and Management leadership are involved and consulted on the casemix method selected to determine funding (under Activity Based Finding) to ensure the method supports the future state model of care.

1. Introduction

South Australia has an ageing population ². Older people are significant consumers of health services and older people have a higher risk of functional decline ³ and the development of geriatric syndromes when unwell and when in hospital ⁹. 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.

The Geriatric Evaluation and Management (GEM) unit is designed to ensure those older people at risk of functional decline, those with functional deficits and the ability to reverse their functional decline, receive specialist care and leave hospital in the shortest possible time, with the highest level of function, independence and dignity that can be achieved.

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 (AGS)) 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 and Management unit (referred to here as a GEM unit) in each of the general 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 (GCLT). The AGS leads teaching, training and research in geriatric health care ⁶.

2. Purpose

The purpose of this document is to describe current practice in the provision of GEM services in each metropolitan LHN, the evidence for the optimal GEM unit model of care and the future state model of care using the timeframes of the Health Services Framework for Older People 2009 to 2016 ¹. GEM services provided across CHSA-LHN are described separately in the document Country GEM Model of Care ⁷.

3. Why reform current practice?

Many older people, currently in an acute hospital bed, actually require GEM services, but there are inadequate GEM beds to meet demand. Currently the system is failing to meet the needs of older people; in addition, because older people are spending longer in acute hospital beds, patient flow through acute hospitals is problematic, resulting in queuing in Emergency Departments.

The number of GEM beds, the GEM unit infrastructure, the GEM unit staffing, the model of care and the AGS resources required to implement and resource all components of an AGS (which is required for the GEM unit to function optimally) varies across the three general 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 health services by older people strongly supports the need for reform.

3.1 Number of GEM beds required

To determine the number of GEM beds required without considering the optimal ratio of acute beds to GEM beds, is not ideal. Currently there is no available evidence to use to support a recommendation regarding the balance of acute to subacute beds. This relationship should be considered in forecasting bed requirements across South Australia. By doing so we acknowledge that additional GEM beds will be gained by converting existing acute beds to GEM beds.

Given South Australia has an ageing population and many patients are admitted to acute beds because there are not enough GEM beds and many patients are having extended stays in acute beds because there are not enough GEM beds, there is a strong case for rebalancing the system.

In the absence of this information, we refer to the Australasian Faculty of Rehabilitation Medicine who have published a Position Statement with a recommended benchmark of 15 GEM beds per 100,000 population ¹⁰. Based on this benchmark and Planning SA's 2006-2021 population projections ², the CA-LHN requires 53 additional GEM beds, the NA-LHN requires 45 additional GEM beds and the SA-LHN requires 17 additional GEM beds by 2021 (Table 1).

Table 1. Population (2006) and Population Projections (2011, 2016 and 2021), and actual (2011) and required (2021) GEM beds by LHN

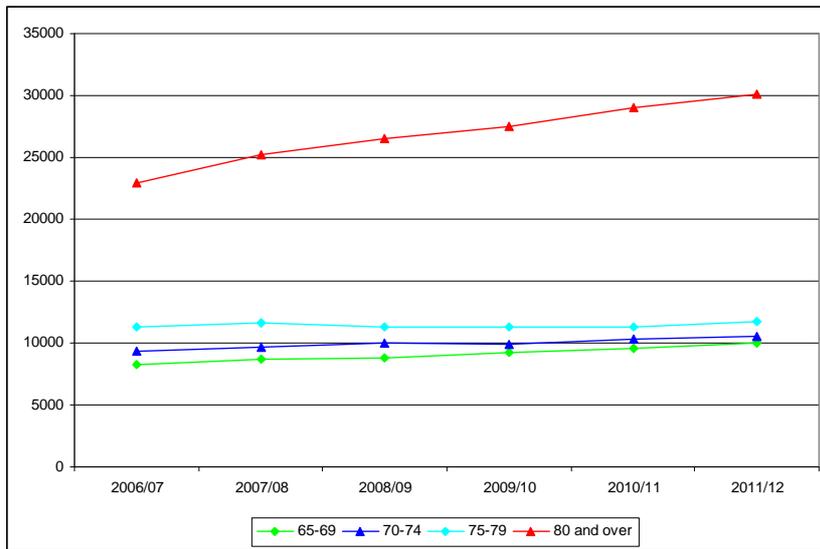
	2006	2011	2016	2021
CA-LHN Pop	430,495	451,228	471,106	487,765
CA-LHN % 75+	9.2%	9.1%	9.1%	9.8%
GEM Beds		20		73
NA-LHN Pop	361,060	393,015	427,781	456,760
NA-LHN %75+	5.7%	6.2%	6.6%	7.2%
GEM Beds		24		69
SA-LHN Pop	334,845	356,424	378,667	392,964
SA-LHN %75+	8.0%	7.9%	8.1%	9.1%
GEM Beds		42		59

Source: Planning SA Population Projections 2006-2021

3.2 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 ¹¹ (Graph 1).

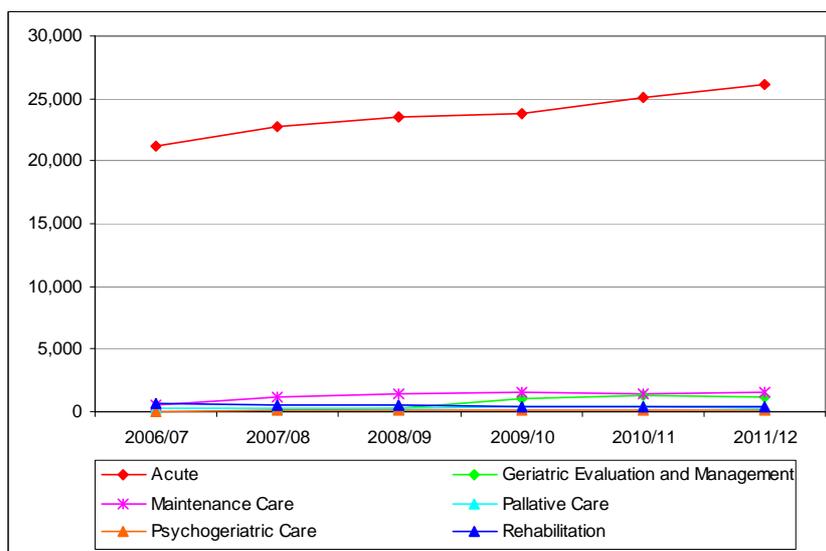
Graph 1. Overnight separations for people aged 65 years and over in SA's major and general metropolitan hospitals (NHS RGH FMC MH LMHS RAH TQEH)



Source: ISAAC

For those aged 80 years and over the activity in overnight separations is predominantly for acute activity ¹¹ (Graph 2). While there has been growth in GEM unit activity, as recorded by Episode of Care type, growth is limited by the number of available GEM unit bed.

Graph 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

3.3 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 through 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 (TCP, 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 ⁴ 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 ⁶.

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 ⁶
- Acute Care of the Elderly Unit Model of Care ¹²
- Geriatric Consultation and Liaison Team Model of Care ¹³
- Community Geriatric Services Model of Care ¹⁴

3.4 Role of GEM in the context of an AGS

An AGS with access to AGS governed subacute inpatient beds (a GEM unit) can manage the timely admission of older people directly from the community, through the Geriatric Consultation Liaison Team (GCLT) 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 a GEM 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, there needs to be flow through the GEM unit. Each LHN needs to have adequate GEM beds, and be supported by an AGS that includes each component of the AGS and each component of the service is required to be fully resourced. For a GEM unit this means working closely with the resources of a GCLT and an ACE unit; and having access to 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 GEM unit, in the context of an AGS, is depicted in the AGS conceptual model in Figure 1.

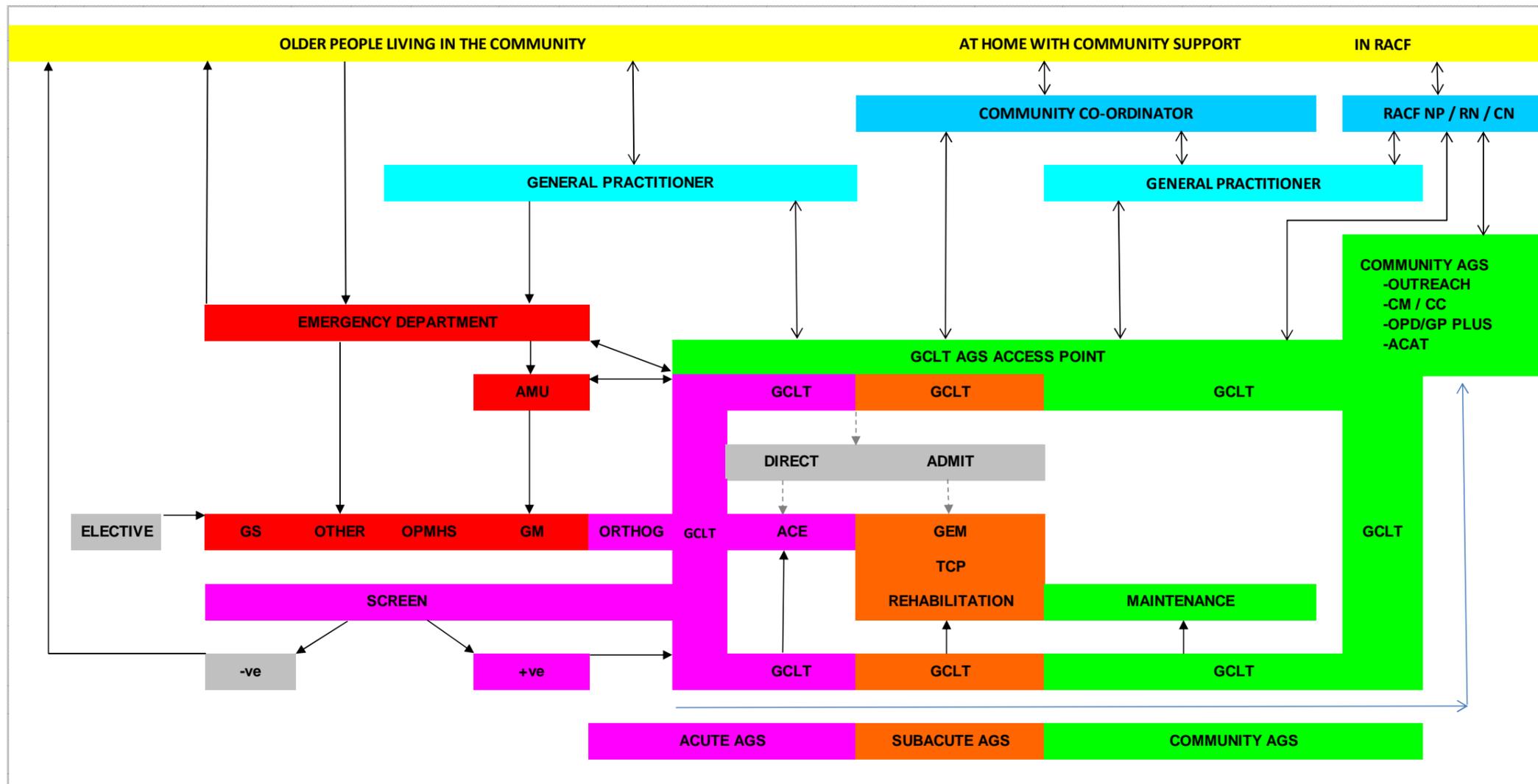
The conceptual model reflects acute services in red, subacute in orange and community services in green. For an AGS to function, there needs to be some dedicated acute service (coded red), more subacute than acute services (coded orange) and substantial capacity in community based services (coded green).

3.5 GEM and ACE

Older people requiring specialist inpatient geriatric health services cannot be perfectly categorised into ACE or GEM unit services. It is more realistic to consider the services along a continuum, where ACE provides for the immediate short term acute health needs and GEM provides for longer periods of rehabilitation and restorative care.

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 general hospital (RGH, TQEH and MH) requires a GEM unit¹. The number of GEM beds, the GEM unit infrastructure, the GEM unit staffing and the model of care varies across the three general hospitals of the metropolitan LHNs.

4.1 SA-LHN

As of January 2013, the SA-LHN has 42 GEM unit beds spread across two sites (Noarlunga Hospital and the RGH). In 2013, the Noarlunga beds may possibly be relocated to the RGH.

In 2011, the SA-LHN provided services to a population of 356,424 people², 7.9% of whom were aged 75+, based on the AFRM Standards¹⁰, SA-LHN should have had 53 GEM beds in 2011 and requires 59 beds by 2021.

4.2 CA-LHN

The QEH has a 20 bed purpose built ground floor GEM unit with access to a secure, dedicated garden space. The GEM unit is co-located with the Stroke ward and is located within the precinct of the ambulatory rehabilitation services and the older people's mental health service.

In 2011, the CA-LHN provided services to a population of 451,228 people², 9.1% of whom were aged 75+, based on the AFRM Standards¹⁰, CA-LHN should have 68 GEM beds in 2011 and requires 73 beds by 2021.

4.3 NA-LHN

Modbury Hospital has a 24 bed GEM unit located in a refurbished medical ward located on the 2nd level; it has no dedicated garden space, dining space or exercise space.

In 2011, the NA-LHN provided services to a population of 393,015 people², 6.2% of whom were aged 75+, based on the AFRM Standards¹⁰, NA-LHN should have 59 GEM beds in 2011 and requires 69 beds by 2021.

5. Evidence to support change

5.1 Policy

The Health Services Framework for Older People 2009-2016¹ describes the requirement for general hospitals to have Older People's Acute Assessment and Management Units (referred to here as GEM units).

"In General Hospitals, specific units will be established to provide comprehensive services including:

- Early (and ongoing) comprehensive multidisciplinary assessment of the biomedical, psychosocial and functional status of the older person
- Tailored treatments, diagnostic and therapeutic interventions that focus on the syndromes and diseases associated with ageing
- Care planning in consultation with the older person, their family, carer and the community services involved in their care

These units will be established in general hospitals and will accommodate older people on an acuity spectrum that ranges from those who have high to relatively high, but reducing levels of acuity through to those requiring a longer stay, increased periods of restoration and rehabilitation and intensive input to facilitate discharge home”¹(p.18).

5.2 Literature

The highest level of evidence for inpatient GEM units is found in a meta-analysis published by Van Craen et al in 2010¹⁵, which included 7 studies (all randomised). The meta-analysis shows a significant effect in favour of GEM units on functional decline at discharge and on institutionalisation after 1 year. The studies showed that that compared with older people admitted to usual care, those admitted to GEM units had less functional decline at discharge (RR = 0.87, 95% CI = 0.77-0.99; $P=.04$) and a lower rate of institutionalisation 1 year after discharge (RR = 0.78, CI = 0.66-0.92; $P=.003$).

The meta-analysis found admission to a GEM unit had no significant effect on length of stay. While a number of individual studies demonstrated admission to a GEM unit was associated with a reduction in mortality, the meta-analysis did not share this finding.

According to Van Craen et al, the main limitation to the meta-analysis was the heterogeneous way that GEM units are organised and put into practice¹⁵, particularly relating to Comprehensive Geriatric Assessment and the make-up and practice of multidisciplinary teams.

The literature is limited in what it can summarise about the benefits of GEM units, due the heterogeneity of the services across studies. The AGS and GEM leadership team need to collect and compile local data that strengthens the evidence of the benefits and costs of GEM services.

6. Future State Model of Care

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

6.1 Introduction

The GEM unit model of care is not driven by a specific disease or condition of ageing. The model is one of interdisciplinary care where a group of health professionals

collaborate with the patient, their family and carers, to solve problems that are too complex to be solved by any individual or group in sequence.

The GEM model is 'restorative', it promotes independence, it encourages and supports older people to move and undertake their own activities of daily living. This is different from an 'illness' model where patients remain in bed and staff undertake activities for them. Within the GEM unit, and based on the Comprehensive Geriatric Assessment, older people are encouraged to dress in day clothes, sit out of bed, eat their meals out of bed, attend to their own personal care, including the use of a toilet, not a commode/bedpan and participate in group and/or individual activities to maintain and improve their level of function.

The GEM model supports the older person, and their family and carers, to be empowered to participate in their care, and is intended to be delivered according to the 10 Principles of Dignity in Care ¹⁶.

6.2 Optimal size of a GEM unit

GEM units should be 20 beds or more to support an efficient staffing profile. Given *the Framework's* ¹ direction for GEM unit's to be located at general hospitals, and the number of GEM beds required, it is likely wards will need to be larger or designed as 'pods' of beds located within a distinct precinct within the hospital, preferably co-located with inpatient and ambulatory rehabilitation and aged mental health units.

6.3 Physical environment of the GEM Unit

A GEM unit is a physically separate ward or unit with dedicated beds, ideally located on the ground floor, with areas that can be made secure. 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 ¹⁷.

The physical environment of the GEM unit should comply with the 113 recommendations of the National Ageing Research Institute (NARI) 'Improving the environment for older people in health services' audit tool (2009) ⁸.

Where GEM units do not comply, the capital or operational investment required to achieve compliance should be documented, prioritised and submitted for inclusion in LHN capital and operational plans.

Essential components of the physical environment of a GEM unit include:

- Fixtures, fittings and signage that comply with the NARI audit tool
- Predominantly single or double patient rooms with ensuite
- A secure area
- A separate dining room
- An occupational therapy kitchen

- A separate physiotherapy/occupational therapy/exercise room
- A mobility garden attached to the unit
- Adequate physical therapy equipment and an equipment storage room
- Meeting rooms
- Office space
- Hydrotherapy

6.4 Target Population

GEM units are intended for use by people aged > 65 years (>50 for Aboriginal people), and prioritised for people aged 80 and over, who:

- Prior to the current hospital admission were living in their own home in the community or low level residential aged care facility;
- Are reasonably likely to be discharged home or to low level residential aged care facility;
- Require complex, interdisciplinary assessment or comprehensive geriatric assessment; and/or
- Require a trial of therapy to determine whether potential for recovery exists.

The best use of limited GEM resources will not be achieved by admitting older people who:

- Are severely medically unwell (e.g., require 2 hourly nursing interventions, require multiple medical devices and/or require highly specialised medical/surgical interventions);
- Have an underlying medical or surgical problem that would be better managed in an alternative specialist service;
- Require an alternative rehabilitation, hospice or acute psychogeriatric program;
- Are able to be discharged directly home without significant interdisciplinary input;
- Require only single discipline input;
- Are awaiting placement in a residential care facility;
- Are likely to require high level of care following discharge from hospital; and/or
- Are unlikely to survive the current admission.

The allocation of patients with Behavioural and Psychological Symptoms related to Dementia needs to be considered across GEM, ACE and Aged Acute Mental Health units.

For all referrals to the GEM 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.

6.5 Identification of patients for GEM unit admission

The objective of the process is to identify and transfer the patient as quickly as possible to the GEM 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 a GEM unit, the person could be referred by their General Practitioner 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 GEM unit, and so avoid an unnecessary emergency department (ED) presentation and unnecessary admission to the Acute Medical Unit (AMU).

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

For patients admitted through the ED, the ED doctor can contact the AGS Geriatric Consultation Liaison Team to make a request for consultation. When there are GEM beds available, the Geriatrician can directly admit the patient to the GEM unit from the ED.

The AGS will manage the transfer of patients between the major hospital's ACE unit and the general hospital's GEM unit.

A screening process of older people in non AGS units with a high prevalence of frail older people (e.g., orthopaedics, acute medical units) is undertaken by the GGLT 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 GEM unit.

6.6 Care within the GEM unit

The effectiveness of GEM units is based on the process of Comprehensive Geriatric Assessment and the work of the interdisciplinary team who undertakes the assessment. The interdisciplinary team provides the interventions as determined by the assessment, measures the progress the older person makes with the implementation of the interventions, and based on progress, as reviewed in twice weekly interdisciplinary meetings, determines a plan for discharge.

It is the physical environment, the comprehensiveness of the assessment, the size, makeup and expertise of the interdisciplinary team, working in collaboration, delivering highly specialised care within a culture that is consistent with the 10 Principles of Dignity in Care ¹⁶ and operating within the governance of an AGS that separates GEM from usual care.

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 appropriately¹⁹.

In SA, reference to the Care of Older People Toolkit (*The Toolkit*)⁵, 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 Toolkit⁵ 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 Direction²⁰.
- Appoint a substitute decision maker if they wish to, and are competent to do so, through a Medical Power of Attorney²¹ or an Enduring Power of Guardianship²².
- 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. 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 care.

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 – considers **Domain 6.** Delirium, **Domain 7.** Dementia, **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.

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 Care – oral disease impacts on health and the quality of other areas of life.

6.6.2 Twice weekly 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* and to discuss the discharge plan.

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

6.6.3 A culture consistent with the 10 Principles of Dignity in Care

Consistent with person-centred care, and consistent with the basic philosophy that we should treat others as we would want then to treat us, GEM services are delivered by a team that supports a culture consistent with the 10 Principles of Dignity in Care ¹⁶

- 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 a GEM unit and enables it to deliver better patient outcomes that support independence, rapid recovery and dignity.

6.7 Flow of patients through a GEM unit

Older people in GEM units are likely to have multiple, chronic morbidity and a number of emergent diagnostic problems. As such they are likely to require frequent and regular access to medical and surgical specialist opinion. Delays in accessing timely consultation or intervention from medical, surgical, pathology and radiological services for example has the potential to increase length of stay, impede flow and contribute to access block. To support activity flow through acute hospitals, GEM patients need access to timely non-AGS specialist review.

In addition, GEM patients require timely access to investigation with technologies such as MRI, CT, ultrasound, echocardiogram and access to the full range of nuclear medicine diagnostics (e.g. PET, SPECT). Ideally these services should be located on-site as moving frail elderly patients between sites can pose additional risk (eg. Increased risk of delirium), interfere with therapy and prolong hospitalisation.

Older peoples' mouths are prone to oral disease which significantly impacts levels of comfort, appetite, oral intake and nutritional status; and may also increase the risk of general health complications such as aspiration pneumonia. GEM patients with acute and urgent dental problems may require timely access to SA Dental Service dental consultation prior to discharge. Alternatively, in the case of less urgent dental problems, discharge planning recommendations should include the need for community-based (private or public) dental care.

To maintain flow, GEM patients require priority access to 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 a GEM unit requires the repatriation of rural patients back to a CHSA-LHN facility or service, including a country based GEM service 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 Team

Within the GEM unit, patients are admitted under the bed card of a geriatrician. The GEM 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 GEM staffing levels requires discussion and agreement between SA Health and the key industrial groups.

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

7. Monitoring and reporting

The GEM leadership team is responsible for monitoring and reporting on the performance of the unit through the AGS to the executive of the LHN.

7.1 Recording GEM unit activity

Older people must be admitted to a GEM unit in order to benefit from the model of care. Therefore patients should only be coded in the patient management system as having a GEM Episode of Care when they are admitted to the GEM unit. Each GEM unit requires a process to ensure the patient's Episode of Care is changed to GEM once they are admitted to the unit and changed again if they leave the unit prior to discharge from the hospital.

7.2 Funding GEM units

Up until 30 June 2014, GEM units will continue to be funded as a bundled DRG, with acute and GEM care. This method of funding has made it difficult to understand how funding approximates the cost of providing the service; also as a result of bundling activity, there have been no specific activity targets set.

As of 1 July 2014, subacute services, including GEM, will be funded through Activity Based Funding. As of January 2013, the casemix method for funding had not yet been determined. The method is important as it is essential that the casemix method supports the future state model of care. During FY 2013/14 the method for determining funding will be determined by the Independent Hospital Pricing Authority. The AGS and GEM leadership team will need to remain aware of the changes this will bring, including the requirement for data collection.

7.3 Monitoring performance

7.3.1 Patient outcomes

- Patient/carer satisfaction, compliments and complaints
- Functional change from admission to discharge, using the Barthel's Score
- Adverse events
- Code Black/MET calls
- Unplanned readmissions (28 days)
- Mortality
- Relative Stay Index
- Falls rate benchmarked against similar geriatric units
- Number of patients living at home 12 months post discharge
- Setting the patient was discharged to and with what supports

7.3.2 Access

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

7.3.3 Process

- Assessments completed within 72 hours of admission to GEM unit
- Interdisciplinary goals identified within 5 working days
- Evidence of weekly interdisciplinary discussion of each patient
- Interim discharge summary on discharge, geriatrician reviewed final discharge summary within 7 days of discharge

7.3.4 Flow

- GEM unit occupancy
- Day of admission and day of discharge (7 day service)
- Length of stay in ED prior to admission directly to GEM
- Length of stay in GEM (median and mean LOS)
- Total Length of total hospital stay
- 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.)

7.3.5 Resources

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

7.3.6 Other

- Staff comment / complaints / compliments

8. Teaching and research

The GEM leadership team, under the governance of the AGS, will:

- Plan and participate in the teaching program within and beyond the GEM unit
- Identify and participate in priority areas for research

9. Recommendations

The following recommendations are made as a guide to the implementation of Level 6 AGS GEM units:

- Each LHN has the appropriate ratio of acute beds to subacute beds, including GEM, and that the number of GEM beds required are operational by 2016;
- The Department for Health and Ageing works with the LHNs and the Older People Clinical Network to determine the balance of acute to subacute beds.
- The GEM unit infrastructure complies with the requirements of the National Ageing Research Institute's Improving the Environment for Older People in Health Services -An Audit Tool ⁸;
- The Geriatric Evaluation and Management unit is resourced to support the delivery of the Future State Model of Care;
- The GEM unit operates as a component of the LHN's Area Geriatric Service, particularly as it relates to the Geriatric Consultation Liaison Team;
- The staff of the GEM unit use the GEM Model of Care processes for referral, admission, management and discharge;
- The GEM leadership team plans and participates in a program of education, training and research, undertaken within the context of the AGS;
- The GEM leadership team monitor and evaluate the performance of the GEM unit, including teaching and research activities, and communicate this to staff of the LHN; and
- The GEM leadership are involved and consulted on the casemix method selected to determine funding (under Activity Based Funding) to ensure the method supports the future state model of care.

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