1. Comprehensive Geriatric Assessment can be defined as a multi-dimensional, interdisciplinary process used to quantify an older individual's medical, psychosocial and functional capabilities. It includes diagnosis, identification of problems, goal setting, and forming a comprehensive management plan for holistic treatment, rehabilitation, support and long-term follow up. It is part of the core skills and knowledge base of specialists in geriatric medicine.

2. Comprehensive Geriatric Assessment has proven efficacy in affecting optimal living location, reducing hospital readmission, maintaining optimal cognitive and physical function and reducing mortality. It is useful in guiding therapeutic and prognostic decisions about the older person.

3. The older person is central to the process and the focus of the assessment. His/her consent must be sought, and if it is felt that there is a lack of capacity to participate voluntarily, this must be assessed, and their needs addressed in an ethical fashion. The assessment process must be multi-dimensional, considering the person's living environment, physical, mental and social status as well as any carers. The aim is to address the needs of the person to keep them living as well and independently as possible, in their chosen living environment.

4. Geriatric assessment should not be applied indiscriminately to all older people, but targeted at those with moderate amounts of disability, as this group is proven to benefit most. Patients at risk for functional decline need to be assessed when they contact the health system either during hospital admission or in the primary care setting.

5. Specialists in geriatric medicine are fundamental to the delivery of effective geriatric assessment. Assessment is delivered on a referral basis by specialist geriatric medical services as part of a regional geriatric service. Aged Care Assessment Services (ACAS) are one modality that delivers this assessment and therefore must be integrated into the regional geriatric service. This provides seamless care with specialist geriatricians as well as an array of other programs that regional geriatric services may operate.

6. ACASs must be based on a multi-disciplinary team model with physiotherapy, occupational therapy, social work, nursing and geriatric medicine being the core elements. It is imperative that assessment teams have optimal communication with general practitioners and local community services, as effective care can only be provided when there is communication between all levels of the healthcare system about an individual's needs and management plan.

7. Objective assessment of cognition, and function should be part of every assessment. It is important to use validated instruments for this purpose where possible, keeping in mind their appropriateness in the setting where the assessment is undertaken. Recording of this information should be structured with the framework of the International Classification of Function, Disability, and Health in mind.

8. Functional ability (performance) is determined by the interaction of a person's
disability and their environment, hence the best place for assessments to be carried out is in the person's usual place of residence. Aged care services must have the resources to provide adequate staff, including specialist geriatrician, nursing and allied health staff, to provide a prompt assessment service in the person's home.

9. An essential part of geriatric medical practice involves home visits and community consultations. All geriatricians must have some degree of training in home visits, which require different skills compared to clinic visits. Home visits should be targeted at those older persons experiencing difficulty in attending outpatient clinics, or where a specific problem needs to be addressed that is best assessed in the person's usual environment.

10. Often older people are assessed in inpatient settings, especially during an acute crisis. This is frequently associated with a request for a high level of care. Geriatric assessment services need to be based in acute hospitals in order to provide the rapid response needed in that environment, therefore allowing those patients in need of rehabilitation or specialist sub-acute care to be transferred expeditiously. This also facilitates the education and training of acute hospital staff (medical, nursing, allied health and administrative) in the needs of older people.

11. Some clinical conditions common in older people need access to multi-disciplinary teams with particular clinical and investigative skills and knowledge. Such teams include, but are not restricted to, those for cognition, falls, continence, sensory impairments (visual and hearing), pain and wound clinics. These clinics should also be integrated into the regional geriatric service.

12. Assessment services for older persons need to cater for rural, non-English speaking and indigenous groups, as well as those with psychiatric illness. This may involve the hiring of staff with particular backgrounds to ensure cultural sensitivity. Assessment services need to be adequately resourced to provide for geriatricians to visit rural and isolated areas if required.

13. As the pressure and cost of inpatient services increase there is a move for care to be delivered away from the hospital setting. In addition there is increasing evidence for improved quality of care and consumer satisfaction amongst the older population with this shift. Consequently the role of geriatricians in the community is expanding from the traditional outpatient clinic and home visit. Geriatricians should form collaborative relationships with primary health care providers and residential aged care facilities in the areas of preventative medicine, early intervention, sub-acute and acute care, as well as palliative care and advanced care planning.

This Position Statement represents the views of the Australian and New Zealand Society for Geriatric Medicine. This Statement was approved by the Federal Council of ANZSGM on 22 August 2011. Authors: Dr Gail Jamieson and Associate Professor Robert Penhall.

BACKGROUND PAPER

DEFINITION

Comprehensive Geriatric Assessment can be defined as "a multi-dimensional, usually interdisciplinary, diagnostic process used to quantify an elderly individual's medical, psychosocial and functional capabilities"<1>. It includes identification of problems, goal setting and forming a comprehensive management plan for holistic treatment, rehabilitation, support and long-term follow-up <2>. It has two essential components: the process of evaluation coupled to an appropriate management plan. Comprehensive Geriatric Assessment (CGA) is a fundamental part of a specialist geriatrician's practice.

EVIDENCE OF EFFICACY

CGA had its beginnings in the UK during the 1930s, when Drs Marjory Warren, Lionel Cosin and Sir Ferguson Anderson identified a high prevalence of unrecognized yet remediable disorders in frail older people, many of whom were residing in long-term care institutions <3>. A variety of models of practice have evolved for the assessment of older patients' care needs since. The assessment process has been carried out as an inpatient service, as a community-based service and as a purely liaison service to other physicians. While there have been conflicting results from individual trials
evaluating the effectiveness of these different models of CGA, meta-analyses <4,5> of controlled trials indicated that CGA has significant benefits on short-term mortality, living location, physical and cognitive function and hospital readmission. Those programs where control over medical recommendations and extended ambulatory follow-up were provided were more likely to be effective.

Over the last 10 years there has been increasing evidence for improved functional outcomes as a result of CGA in specific conditions including stroke, hip fracture, falls, delirium and heart failure as well as people having elective surgery and those having developed difficulties in attending to personal care for the first time<6,7>. CGA is also beneficial in providing preventive care for older people living in the community <8,9,10,11>. In Australia the drop in nursing home admissions which has occurred since 1985 is related to the introduction of geriatric assessment prior to nursing home admission. This has had undoubted economic benefit by delaying or prioritizing the need for expensive long-term care <12>.

**GUIDING PRINCIPLES**

Although there is considerable variation in the way geriatric assessment services are organized, there are a number of guiding principles

The assessment process has as central the older person's needs and wishes. To initiate the process the consent of the person must be sought. However, if it is felt that there is a lack of capacity to consent then this must be assessed and their needs addressed in an ethical fashion <7>. Part of geriatric assessment is acting as an advocate for an older person's rights and trying to ensure that the person is able to make informed choices about future care. Geriatric assessment should educate patients, relatives and carers about the system of accessing aged care services. In addition, if there is a suspicion of abuse of an older person's rights (elder abuse) then appropriate intervention is necessary<13>. Older persons and their carers should be empowered by the process <14>.

b) The assessment process needs to be multidimensional and multidisciplinary. Most problems faced by older people are multifactorial and functional impairment is usually due to multiple medical and psychological antecedents, as well as environmental factors<15>. The aim of the assessment is to identify all impairments and so ameliorate the resultant disability, and handicap. Functional ability (performance) is influenced by health conditions and contextual factors (environmental and personal)<15>. Decisions about future care and accommodation must consider all these factors. There are a few well-designed studies that suggest functional performance in a familiar environment is better than in a clinic or hospital environment. This may be particularly so for patients with dementia <16>. For example, a person with dementia may become incontinent because of unfamiliarity with the hospital's toilet facilities, but would manage in more familiar surroundings. The experiences of the caregiver also need to be assessed as caregiver burden is a better predictor of service use than any measure of the older person's health or functional capabilities <17>. Carers may also be old, often with significant health problems of their own, and supporting them in their own right, may improve the older person's ability to manage.

c) The assessment process needs to be targeted at those likely to benefit. Geriatric assessment is not effective if applied indiscriminately to the older population nor could such services be provided in an environment of limited resources. In general those patients with a moderate amount of disability are most likely to benefit, compared to those severely disabled and those relatively fit<6,7,9,10,14>.

Circumstances which warrant a comprehensive geriatric assessment include post-acute illness in a frail patient with associated change in functional ability, pre-surgery, or any person experiencing a geriatric syndrome (impaired cognition, mobility, incontinence etc)<7,18,19,20>, as well as those whose carers could no longer give support <21>.

**GERIATRIC ASSESSMENT IN THE AUSTRALIAN AND NEW ZEALAND HEALTH CARE SYSTEM**

In Australia and New Zealand CGA is delivered
by a variety of mechanisms and funded from different sources but an integrated approach is imperative. This pattern of care is seen in inpatient acute and rehabilitation units, in transitional care, in multi-disciplinary outpatient clinics (e.g. cognition, falls and balance clinics) and in specific geriatric evaluation and management units, and is supported by the community Aged Care Assessment Services (ACASs). In addition CGA may be provided on a consultative basis to patients who are acutely unwell in hospital.

Assessment by an ACAS is mandatory prior to entering a government funded residential care facility. ACASs are funded and given the delegated authority by the regional and national government to approve receipt of specific packages of care in the community and entry to residential care. The ACAS operates under the principles of CGA in that a multi-dimensional assessment of a patient's needs is undertaken with subsequent referral to social services, rehabilitation and other therapeutic options where needed. Thus the ACAS plays a vital role in the delivery of social services and the screening for patients who may need a more detailed assessment. In order to carry out this role successfully it is essential that ACASs are integrated into the regional geriatric service, which provides the diagnostic and therapeutic arm of geriatric assessment. This integration allows the best clinical assessment for patients and the tailoring of services to their needs. It is self-evident that the best outcome for the patient involves the linking of a social, medical, psychological and functional needs assessment to the delivery of appropriate services, treatment, and, if appropriate, residential care.

Efficient and effective care can only be provided when there is communication between all levels of the healthcare system about an individual’s needs and management plan. The process must operate on the principle of concordance (or working together) <14>. Systems should be put in place to allow the sharing of information amongst healthcare providers while preserving the older person’s right to privacy and confidentiality <14>. This is important in order to decrease repetition on the part of the healthcare system itself as well as allowing consumer use of the system without enduring unnecessary repetitive questioning and assessment.

#ACAS
- Australia – (ACAT) Aged Care Assessment Team
- New Zealand –(NASC) Needs Assessment Service Co-ordination

METHOD OF ASSESSMENT

Geriatric assessment in an inpatient setting has been discussed in another position paper <22>. Consequently emphasis here has been given to assessment occurring in community settings. Where discussion is relevant only to the practice of ACASs, this distinction has been made.

For community dwelling older persons, at least part of the geriatric assessment must occur in the person’s own home. This could range from interventions by a physiotherapist or occupational therapist to provide equipment to make the home environment safer, a comprehensive assessment which co-ordinates a whole range of services to enable a person to remain at home, to a home assessment by a geriatrician.

The process of geriatric assessment involves several considerations including the site where the assessment is conducted, which disciplines could best assess and what information should be collected.

Location of Assessment
Community geriatric assessment, in particular an ACAS assessment, occurs in a client’s own home, after admission to hospital following some crisis or when already in a residential care facility such as a hostel or nursing home. Each of these areas has individual requirements as well as issues common to all.

Home
Home is the most appropriate location for assessment of most older persons who are not acutely unwell. A meta-analysis on the impact of home visits in preventing nursing home admission and functional decline indicated that the use of the multi-dimensional geriatric assessment and follow-up were the most important determinants of the program’s effects on functional status outcomes <9>.

Although there is little research outlining the advantages of domiciliary assessment, clinical experience dictates that a greater wealth of information is often obtained. It allows direct assessment of the person’s function in his/her
own environment, of how meals and food are prepared, of the older person's carer network and of medication management. In direct comparison of geriatric home assessment and a clinic visit in a general practice setting, the home assessment is more likely to yield problems with social support <23>, as well as identify medication-related problems <9,24>.

Assessment at home may also influence the decision to move to care, with those assessed at home four times less likely to be recommended for low care (hostel) rather than community services as compared to assessment in hospital <25>. In addition, in this study there was little association between health status and recommendation for low care placement suggesting that this effect is not simply explained by the sicker inpatient population. ACAS assessment for low care accommodation should almost always occur in the patient's home environment.

Hospital
Older people are also assessed by ACASs as hospital inpatients, often after an acute medical crisis, and often when in need of 24-hour nursing care. “Assessments should be performed by health professionals, including a geriatrician, who have extensive knowledge and experience in aged care, including the prognosis and management of acute and chronic illnesses affecting the elderly (and therefore rehabilitative potential) as well as the capacity of home care systems to provide alternative care”<26>. It has been shown that in-hospital CGA increases the chances of living at home independently at 1 year, and improves cognitive and physical function<6>.

Most frequently they are called upon to assess for entry into high care (nursing home). The functional criteria for entry into high care are such that, almost by definition, it is impossible for a person to remain in the community safely for any length of time even with full supports. This is particularly so for older patients who live alone. Hospitals have filled the gap in providing the 24-hour nursing care needed for these patients while in crisis, and until suitable accommodation has been found. Because of financial and bed pressures, there is increasing impetus to assess these patients earlier and quicker, possibly when the patient is not medically stable. These pressures make the need to integrate regional geriatric services into acute hospitals all the more important to provide the rapid response service that acute hospitals are demanding.

Residential care facilities
ACAS assessments also occur in residential care facilities, usually where a transition to a higher level of care is required. While there is an increasing trend for facilities to offer “ageing-in-place”, at times relocation to another facility may be required. Relocation may be a difficult decision for the resident and occasionally an older person, whose carers feel they can no longer be managed in a low level facility, may refuse to leave. This is a difficult situation which requires sensitive handling by the assessment team.

Special Needs Groups
Older people who have a psychiatric illness, are of a non-English speaking background, are of Aboriginal or Maori descent, or who live in rural communities may have difficulty in accessing the full range of assessment services. This is particularly true when accessing the skills of a geriatrician. Assessment services need to develop strategies for dealing with these groups such as the use of interpreters and the hiring of staff from appropriate cultural backgrounds in order to help the service develop culturally sensitive ways of dealing with these groups. Specialist geriatricians have to be prepared to visit country areas so that assessment teams can have access to their services. Consideration of the use of telemedicine links is important in this context.

Assessment Team Composition
At the heart of geriatric assessment is a multi-disciplinary team made up typically of medical practitioners, nurses, physiotherapists, occupational therapists and social workers. Other allied health practitioners in areas such as speech pathology, podiatry, dietetics and pharmacy may also be needed occasionally. There is no evidence as to the efficacy of a Comprehensive Geriatric Assessment without the involvement of specialists in geriatric medicine<2>. The team should meet regularly to discuss the patients under its care and set goals and plans.
Although by its nature assessment is a team process, it may not be practical for the entire team to review every case. In inpatient settings, review by multiple team members usually occurs, particularly as these patients are often in an acute health crisis and have complex problems and circumstances. In ACAS assessments, given the large workloads and the need to visit people in their own homes across a large geographic area, it is not practical for multiple therapists to see each patient. In this instance a single team member, or a limited number of team members, can review the case with the ability to consult the rest of the team should the need arise. However care must be exercised not to overlook areas to which another professional may clearly contribute.

Geriatrician's role.
Comprehensive Geriatric Assessment is core business for specialist geriatricians. Functional impairment usually has as its basis multiple medical and physical problems which require accurate diagnosis. Geriatricians, through their training, provide these skills as well as a broad knowledge base for the management of problems and indications as to prognosis in the older patient. Referral for geriatric assessment is therefore referral for specialist geriatric medical input as part of a comprehensive multi-disciplinary assessment. All inpatient settings, especially acute hospitals, need access to these skills.

Assessments occurring in the community as part of an ACAS visit obviously cannot and do not need to all involve a geriatrician. It is up to the ACAS to make contact with the older person, provide an overview assessment, and determine when involvement of a geriatrician may be required. Geriatricians often have great experience in difficult or unusual circumstances or in issues where questions of competency arise, and can aid in accurate diagnosis and prognosis which is particularly helpful in guiding the development of a holistic management plan.

General Practitioner's role
General practitioners (GPs) play a crucial role in the care of community-dwelling older people. They are in a good position to implement recommendations and provide long-term follow-up which are key components to the success of CGA.

The general practitioner will have often initiated the referral to ACAS or hospital, but if this is not so, should be contacted to provide an input. In addition, when the patient is to be referred to a geriatrician, it is important that the patient's general practitioner be consulted and informed.

A survey in Australia on community ACAS assessments concluded that GPs were largely satisfied with the process but often excluded from the assessment process, received little feedback, and wished for greater involvement <27>. While not always practicable or necessary <28>, when the general practitioner can be present during the assessment process, there is a higher degree of satisfaction for both the team and the GP <29>. Changes in funding to allow for remuneration of GPs for their involvement in the processes of a CGA in varying settings have been welcomed.

Community services role
Domiciliary care and district nursing organizations may also initiate referrals and their input is of great value. A close liaison between regional geriatric services / ACASs and community services is vital to the successful coordination of many cases. In some states, the regional geriatric service/ACAS and the domiciliary care services are part of the one organization and this could be the preferred model of delivery assuming that this does not interfere with the structural integrity of any party.

Information Gathering
Role of the carer
Unlike the traditional medical consultation, geriatric assessment typically needs to involve carers and relatives as well as the patient. This is particularly the case when the older person has cognitive impairment. In order to obtain a complete picture of all the issues, a separate interview of the carer should always occur. However, the older person's needs and wishes are paramount. If there is a question of cognitive capacity, appropriate assessments should be made and then any decisions regarding the person should be made in the older person's best interest.

Assessment instruments
It is impossible to prescribe an exact data set that needs to be collected for each person. The concepts and framework of the International
Classification of Functioning Disability and Health should be kept in mind when recording assessments<15>. At least two objective measurements should be taken, one of cognition and one of a person's functional status, and in certain circumstances objective measures of mood should also be gathered. This allows for a more accurate description of a person's abilities, ensures that significant cognitive impairment and mood disturbances do not go undetected, and enables easier communication between staff at team meetings. These measurements are limited in that they will not give a diagnosis as to the underlying cause of a person's cognitive and functional impairments. Diagnoses such as dementia or depression need a full clinical evaluation, although an appropriate score on a measurement scale will help inform the diagnostic process, and frequently monitor progress.

With regards to cognitive assessment, as part of an Australian Federal Government initiative to have a standard suite of instruments for all health professionals to use, The Dementia Outcome Measure Suite (DOMS) was developed in 2007, and is a useful resource when deciding on which particular tools to use in various settings. In using all validated instruments it is important to keep in mind their appropriateness where the assessment is undertaken. For example when an ACAS sees someone at home it may be more appropriate to collect information on a minimum number of domains of function (Table 1) rather than use an instrument validated in a rehabilitation setting. <30>. The domains that should be covered in a functional assessment of every older person are listed in Table 1.

It would aid in policy and planning if there was a comprehensive assessment tool for older people with chronic and complex needs that could be applied across care settings. There have been a number of groups in Australia and New Zealand that have looked at existing validated tools but none have been found to be ideal<14,31>. There needs to be ongoing attempts to modify these for local settings.

Table 1: Domains that should be covered in a functional assessment

<table>
<thead>
<tr>
<th>Personal Activities of Daily Living</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walking and transfers including stairs</td>
</tr>
<tr>
<td>Bathing and grooming</td>
</tr>
<tr>
<td>Dressing including shoes and socks</td>
</tr>
<tr>
<td>Toileting and continence</td>
</tr>
<tr>
<td>Feeding</td>
</tr>
<tr>
<td>Instrumental Activities of Daily Living</td>
</tr>
<tr>
<td>Meal preparation</td>
</tr>
<tr>
<td>Housework</td>
</tr>
<tr>
<td>Shopping</td>
</tr>
<tr>
<td>Financial management</td>
</tr>
<tr>
<td>Transport</td>
</tr>
<tr>
<td>Medication</td>
</tr>
<tr>
<td>Using the telephone</td>
</tr>
</tbody>
</table>

COMMUNITY PRACTICE

The continued promotion of community-based care where possible over hospital care for chronic and complex conditions<15,32> means that there is an increasing need for specialist geriatricians to be involved in community practice, including innovative ways to manage acute deteriorations, and focus on prevention and self-management. All assessments in the community should be used as an opportunity to review and provide primary, secondary and tertiary interventions. Geriatricians also play an educative role not only at the individual level but with service providers.

An integral part of geriatric medical practice is the domiciliary assessment. Because of their many co-morbidities, older patients can find it difficult to attend the traditional outpatient setting and in such circumstances a home visit is often more informative. The home visit has been seen as the domain of the general practitioner but it should be a vital part of the specialist geriatrician’s practice in selected circumstances. GPs value home visits by specialist geriatricians<28>, allowing them to have a collaborative approach to patient management. By complementing and supporting the role of the primary doctor, identifying common but frequently un-recognized geriatric conditions and aiding in resources to evaluate and treat patients, use of limited geriatric resources can be maximized<11>.

The method of clinical examination is different for home assessment and requires a separate set of skills. Some aspects of clinical examination, for example detailed physical examination, may be difficult to perform. Functional-based assessments such as observation of gait, arising from a chair and other simple daily activities are easier and better
performed at home where the environmental hazards can be directly observed. Standardized clinical examinations of gait are good predictors of falls in community <33>, institutional settings <34> and populations including the very old <35>. Cognitive testing is also reliably and easily carried out at home. It is vital that practitioners who see older patients at home are capable of performing these assessments.

Visiting patients in residential care is also an important aspect of community work. Specialist geriatricians can provide timely input into the management of behavioural and medical problems that nursing home residents have, in particular the rationalization of medication and the use of psychotropic drugs. In addition, involvement in advanced care planning and hospital-in-the-nursing home has been shown to decrease hospital admission and mortality of nursing home residents<36>.

Increasingly geriatricians are being involved in innovative ways to deliver health care at home. Rehabilitation programs can work effectively in the home environment and produce significant improvements in function <37>, as well as increased patient satisfaction. A recent trial in Italy demonstrated clinical feasibility and efficacy in providing hospital-at-home care for elderly people with acutely decompensated chronic heart failure<38>.

Delivering care in an efficient manner to the increasing ageing population requires innovative ways to manage chronic and complex disease with more care being delivered in the community. Geriatricians are well placed to be involved in the development of community care services and to provide important input into their delivery.

REFERENCES

15. Towards a Common Language for Functioning, Disability and Health ICF. World Health Organization Geneva 2002,


