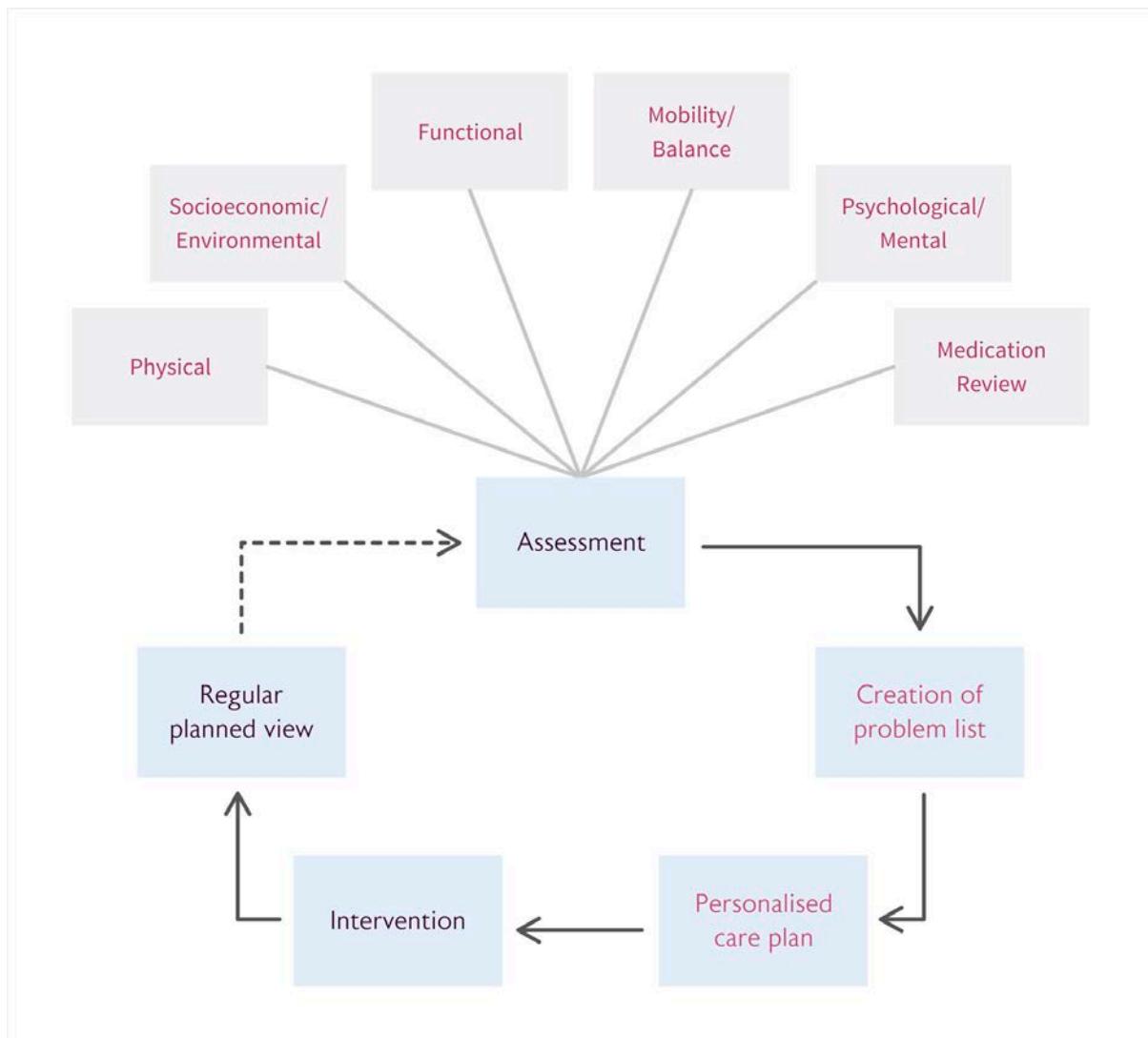




British Geriatrics Society
Improving healthcare
for older people

The BGS toolkit for comprehensive geriatric assessment in primary care settings

An introduction to Comprehensive Geriatric Assessment (CGA) in primary care settings. This toolkit was developed by the British Geriatrics Society for professionals in primary care and has been endorsed by the Associate National Clinical Director for Older People and Integrated Person-Centred Care for NHS England and by the Council of British Geriatrics Society, Scotland.



What is CGA?

Comprehensive Geriatric Assessment (CGA) is a process of care comprising a number of steps. Initially, a multidimensional holistic assessment of an older person considers health and wellbeing and leads to the formulation of a plan to address issues which are of concern to the older person (and their family and carers when relevant). Interventions are then arranged in support of the plan. Progress is reviewed and the original plan reassessed at appropriate intervals with the interventions reconsidered accordingly.

Some bodies prefer to call it a comprehensive older age assessment (COAA). It is also referred to as geriatric evaluation management and treatment (GEMT). It is a form of integrated care and is an example of a complex intervention.

How is CGA done

For more detail on how CGA is done and all the factors which need to be taken into account

Why is it done and who does it?

Evidence shows that CGA is effective in reducing mortality and improving independence (still living at home) for older people admitted to hospital as an emergency compared to those receiving usual medical care.

In community settings, the evidence shows that complex interventions in people with frailty can reduce hospital admission and can reduce admission in those recently discharged and can reduce the risk of readmission in those recently discharged.

CGA is also a vital part of the management strategy for older people suspected of having frailty in order to identify areas for improvement and support to reduce the impact of frailty.

A recent study showed that comprehensive assessment and individualised care planning can reverse the progression of frailty.

Who does CGA?

The CGA process requires coordination to ensure that the experience is positive for both the patient and their families. As older people's needs are frequently complex and always unique those coordinating the process must display advanced communication skills in addition to their clinical knowledge to ensure purposeful and timely assessment. Therefore coordination of CGA can be undertaken by any member of the health and social care team but is best carried out by someone the patient and their family trusts and with whom they can have open and sensitive discussions.

In many cases this will be the patient's GP – especially if they have known the patient for some time and have been involved in other aspects of their care. GPs in particular will be well placed to handle a medication review in the context of the overall person-centred

goals. Although this could be delegated to a pharmacist, it will not be valuable unless performed as part of CGA.

Nurses are well placed to manage the complexity of assessment in an efficient way drawing together the different strands to coordinate a personalised treatment plan in which the patient and their family share their aspirations and choices. Nurses have a duty to act as patient advocate, empowering people to make shared decisions; these roles are set out within their standards of conduct, performance and ethics.

In cases where there is particular complexity, or where there are concerns about underlying diagnosis or treatment options, a geriatrician working in a community setting could be involved in, or even lead, CGA.

When and where is CGA done?

CGA should be considered appropriate in a number of circumstances, all of which reflect frailty in an individual (for more detailed information see Fit for Frailty Part 1 2014):

- When an older person presents to their GP with one or more obvious frailty syndromes – i.e. falls, confusion, reduced mobility and increasing incontinence even if these appear to be due to a reversible cause – such as a new medication or minor infection or if the ambulance service has already been called – it is unlikely they will have started the process of CGA.
- When a GP or community team learns of an incident which implies frailty in an individual - for example if an ambulance is called after a fall.
- When an older person has been discharged from hospital after presenting with a frailty syndrome (fall, reduced mobility, delirium etc) even if another diagnosis has been offered as the cause. Sometimes a simplistic, and occasionally erroneous, diagnosis such as Urinary Tract Infection- UTI appears to have caused a prolonged admission and this implies significant frailty. In this situation, the process of CGA might have been started in hospital – but it will need to be refreshed once the older person is back in the community in a more steady state.
- In care homes - most residents of care homes (both those with and without nursing care) will have frailty. The process of CGA will help to identify the future treatment goals and support the necessary advance care planning.
- CGA should form part of the process of proactive care and would therefore be also focused on a target population - possibly those with moderate frailty identified through risk stratification. Different federations of GP's in England will be considering their strategies for managing this approach- currently there is no well defined 'best' practice and there is no hard research evidence that systematic screening for frailty offers any economic benefit. Nonetheless the unplanned admissions enhanced services in primary care require consideration of risk stratification.

Several tools for risk stratification and for frailty 'screening' are available and more are being developed. One new tool which may help with risk stratification is the Electronic frailty index eFI. This tool, which is now available in both TPP system one and EMIS web, uses Read codes embedded within the records to compute a score for an individual (it therefore has the obvious disadvantage of relying on good coding). Local decisions can be made as to the cut off points within this range for mild, moderate and severe frailty.

Likewise local plans will be needed as to the pathways to follow once individual's scores are available. There are other examples of clinicians using their knowledge of their own practice population to highlight people who need more detailed assessment.

Where it CGA done?

Since the process of CGA can be performed anywhere, either in the older person's home, in the GP surgery or in a special clinic set up for the purpose in a leisure centre, day centre or hospital outpatient department. The exact situation is less important than the process and activity. It should form part of the care in an acute setting.

It is also ideally suited for the process of proactive care in community settings – however the nature of community working including the geographical and availability challenges for many members of a multi-professional team means that the process will need to be adapted as outlined in 'How is it done?' (see next page in this Good Practice Guide series).

The elements of the CGA process

An overview of how Comprehensive Geriatric Assessment (CGA) is done in the primary care setting, and what to consider when conducting the assessment. Further guides in this series examine the functional assessment and psychological components of CGA.

Comprehensive Geriatric Assessment comprises interdisciplinary and interagency working which places the patient and their supporters at the heart of care.

Such an approach is usually proactive and is logically most relevant when it generates an individual problem list identifying issues and how they have changed over time in a number of domains:

- Physical
- Functional
- Psychological
- Socioeconomic / environmental.

It will then accommodate the individual's own personal goals before documenting interventions and overall management strategies, as well as who will deliver these i.e. a comprehensive care plan.

Depending on the goals/problem(s) identified, the intervention may consist of one or more actions to be delivered by a clinician - doctor and/or other relevant members of the multidisciplinary team (e.g. nurse, physiotherapist, occupational therapist etc), who are included as necessary. The key issue is the collaboration between patient/family/carers and the various members of the team throughout the process. The expectation is that the older person and their family will own this process and regard the resulting care plan as their own. Some of the actions/interventions may rely on activity by the older person themselves.

The holistic nature of CGA covering physical, psychological, functional, social and environmental needs of older people may be confusing if not managed effectively. This is particularly true within the community setting where services are affected by local geography and availability- therefore CGA needs careful coordination.

Making CGA work

Key processes and structures which support implementation and maximise impact of using CGA:

- Development of multi-professional teams
- Clear identification of a joint core level of competence in assessment between health and social care practitioners
- Clarity of when referral for specialist single professional assessment is appropriate
- Single patient held documentation
- Information sharing systems
- Regular MDT review meetings to share knowledge and develop team working
- Access to joint health and social care funding.

Time and financial constraints

Undertaking CGA takes time. To complete the process fully may take up to two hours. Such an undertaking is difficult for individual GPs working in the current model of care where appointment times are short and time in the day very limited. We would envisage the assessment being contributed to by a number of health and social care professionals and there may be a role for the voluntary care sector to be involved. Some sections can be completed by the informal carer. The information would accumulate over time. Developing a model of proactive care for those Older Adults living with Frailty would enable a multidisciplinary approach to comprehensive assessment for those most at risk of unplanned hospital admissions.

Developing a multidisciplinary approach to proactive care will require new models of care – enabling greater integration between primary care and community providers, social care and the voluntary care sector. In England, where commissioners and providers are split, this may be through closer alliances or through the creation of Multispecialty Community Providers – as described in the NHS Five Year Forward View. Enlightened commissioners are already investing in multidisciplinary community teams providing proactive models of care expecting that this will ultimately result in cost savings across the health economy. The fact that this will improve the quality of care for patients is likely to be the greater incentive for General Practice.

Further information

The Rational Clinical Examination, Simel D and Rennie D.

The entire book is excellent, delivered in short chapters asking a specific clinical question. There's no separate geriatric element however many of the issues are relevant to CGA.

McLeod's Clinical Diagnosis, Japp et al. Aimed primarily at trainee doctors. There is a short chapter on assessment of the older patient that expands on some of the themes raised here.

CGA in Primary Care Settings - Physical Assessment

Examination of older patients incorporates all the typical aspects of clinical examination, although there are some general considerations and emphases that should be borne in mind, and specific examinations that may be more relevant in older people. Many of these specific assessments have associated tools but there is no well validated screening tool for general physical examination. The physical examination will guide which areas require more in-depth or systematised assessment.

General considerations

Participation

Older people, particularly those with frailty, may find the clinical examination challenging or tiring. A thorough assessment may have to be split into more than one session or deferred, so initial prioritisation of the most relevant issues is important.

Posture

Within a single examination session, the patient with limitations of mobility, exertion or posture requires an adaptive approach, grouping examinations by position and opportunity rather than organ system or diagnosis and accepting less than ideal condition. For example, a kyphosis or severe heart failure may limit the ability to lie flat and so examination of the abdomen and screening neurological examination of the legs could be done with the patient semi recumbent and consecutively to avoid having to return to this position later.

Assessment of the non-concordant patient

Patients with dementia, delirium, or psychiatric illness may not give consent or participate in examination. Consideration must be given to whether the patient has capacity to agree or refuse examination and, if not, assessment performed bearing in mind the best interests of the patient using provisions of mental capacity legislation. This is likely to be the case for most aspects of clinical examination which are unlikely to be burdensome, harmful or limiting to the person's liberty – however if the patient has previously refused interventions and assessments it should not be assumed that a change in their ability to consent or refuse means that examination is now acceptable. Discussion with the patient's advocate(s) or healthcare power of attorney is also important here.

Opportunistic assessment

Examination is a continuous process and information can be gleaned even when not formally examining – the walk into the examination room may give significant clues about gait & balance, while visual cues such as choice and fit of clothing (e.g. elasticated waistbands) can suggest functional difficulties with dressing, or recent weight change. Non-concordant patients examined under their best interests may be challenging to assess but with assistance, reassurance, and careful observation (eg a variety of purposeful movements in lieu of formal neurological testing of each muscle group) a large amount of information may be gleaned.

Hints and Tips

Sensory loss

Subtle clues can be picked up about sensory deficiencies but these can often be compensated for (e.g. lip-reading in deafness) or concealed (giving non-committal responses at the end of poorly-heard sentences). Quick screens for sensory problems include:

- Whispering numbers in the ear and requesting their repetition.
- Cupping a hearing aid in the hand to check for feedback noise.
- Gross visual testing (number of fingers, read a line from a book).

Feet and footwear

Observation of foot condition is extremely important, often yielding actions which can improve balance and function. Choice of footwear, condition of skin and nails (especially toenail cutting and fungal infections), oedema, anatomical abnormalities and ulcers can all be picked up in seconds. Peripheral sensory testing frequently identifies unrecognised abnormalities although their clinical and functional significance can be difficult to interpret. Vibration testing at the joints, joint position sense, and light touch in the lower limbs may be contributory. Check perfusion in the feet in general are they warm, if not look for pulses and/or capillary refill time (greater than five seconds might suggest ischaemia).

Gait and balance

Observation around the examination (on and off the chair and examination couch/bed, in and out the room) is extremely useful. Timed up and go, number of steps to turn 180 degrees, or formal balance scoring (e.g. Berg Balance Scale) can be useful. All these are described in more detail in the Mobility Balance Section.

Lying and standing blood pressure

This is high yield, giving clues about fluid status, medication effects, and causes of dizziness or falls. The patient must lie flat for at least five minutes, followed by a BP check when standing (supported if needs be) immediately, after one minute a further check at three minutes' standing. Postural hypotension is said to be present with a drop in systolic BP of more than 20mmHg or to below 90mmHg associated with reported syncope or presyncope (although it may not be demonstrated on every occasion). It is important to note that some individuals can continue to have postural symptoms even if there appears to have been no change in BP. These may need referral to a local geriatrician for more formal testing.

Cognition and mood

Interactivity, alertness, vocabulary, ability to follow complex commands and recall can all be noted over the course of an assessment but should be followed up with formal testing-

see section on psychological assessment. Drowsiness, inattention or hypervigilance can be signs of acute delirium if acute (Check 4AT).

Functional ability

A full functional assessment is generally the preserve of specialist occupational therapists, but evidence of difficulties with personal care (hygiene, choice of attire) may be picked up leading to a fuller review.

Pain / joints

Many older patients will deny pain or be unable to express it. Observation during movement or change in posture may yield clues that mobility or function may be limited by pain. Using alternative words when assessing movement (e.g. "stiffness", "ache") may elucidate further. Examination of joints commonly affected by osteoarthritis such as the fingers and knees with functional observation and gross checking of range of movement / crepitus is helpful. A more thorough assessment by a physiotherapist of joint function may then be indicated.

Weight and nutrition

Check and record weight consistently. Other evidence of weight loss such as poorly fitting clothes, or loose skin should be noted. General condition of hair and nails can yield clues about nutrition, and an observation of oral health (including checking of dentures) is useful.

PR and genitalia

Constipation is often missed, and can cause chronic reduction in appetite or recurrent abdominal pain as well as acute deterioration, nausea and overflow diarrhoea. Faecal incontinence can result from this or from other local rectal problems. A PR examination will reveal information regarding these often-missed issues and also assess for prostate size/shape, haemorrhoids, bleeding or rectal masses. Examination of the external genitalia should be done in a complete assessment, and a brief breast examination (irrespective of sex) in addition.

'Normal' age-related changes

It is generally best to avoid assuming that a change is 'normal' for age, although certain non-pathological changes are increasingly common in older adults. Skin changes such as uneven coloration and wrinkling/thinning, and neurological findings such as decreased or absent ankle reflexes and loss of vibration sense in the toes or subtle changes in eye movements may not be significant in older patients.

Functional, social and environmental assessment in CGA

Functional, and social and environmental assessments as part of Comprehensive Geriatric Assessment are important as they add context to the other components of the assessment. For example, what value does an environmental assessment hold if you do not understand how the person functions within that environment? Likewise social and financial circumstances have a direct impact on physical and mental wellbeing. Here we examine both assessments as part of CGA within primary care, including the questions to ask and steps to take.

Functional assessment

Functional assessment can encompass multiple factors like mobility, activities of daily living and the ability to interact with technologies used for telecare. Another factor impacting on function, is sensory loss, as someone with poor vision or hearing can still be as functional as anyone else but with very different coping strategies. On initial assessment it may appear as though this person's functional ability is diminished, but in reality it is only different.

Functional assessment and associated trajectories can also inform decisions and treatment options outside of a full CGA. For example, being able to map functional ability in terms of a progressive decline may aid decisions around elective orthopaedic surgery. Likewise, sudden loss in function may indicate acute illness and guide towards active investigation and management, a slow-sustained loss of function may steer the patient to a more supportive care environment.

There are two components of a functional assessment:

1. What can and what does the person actually do?
2. How recently has it changed?

The first of these components can be relatively easy: one simply needs to ask the questions and tools are available which offer prompts as to the activities needed.

Tools for functional assessment

Most General Practice IT systems have templates for assessment tools, these can be very useful and quick to use. However, because they are embedded with the primary care system, they may not be easily shareable.

Nurses, social workers, physiotherapists and occupational therapists will all be familiar with The Barthel Index as a measure of function. Although it has been around since the 1960's, the Barthel Index has remained relatively unchanged, it is not complex and it is easy to understand the meaning of any outcomes. Particularly helpful is the ability to map a trajectory using Barthel, as baseline scores can be recorded and reassessment is relatively quick once you are familiar with the tool. There is good parity between patient self reports, professional assessment and family opinion. Given its wide spread use, simplicity

and accessibility it remains probably one of the most useful functional assessment tools today.

One of the problems with Barthel is its so called ceiling effect. This means that because it measures very basic function in terms of daily life, one can score quite well on the Barthel and yet still be pretty dependent on others for daily life – for example cooking, laundry, cleaning and shopping.

Hence the development of other tools, for example the Nottingham Extended ADL Scale, which asks about those components of function which enable social participation.

The Timed Get up and Go Test (TUGT) can also be a good indicator of overall function, combining an assessment of physical ability – being able to indeed ‘get up and go’ but, also a test of cognition relating specifically to following instructions and carrying them out successfully. For more details about this see the good practice guide within this series, CGA issues: mobility and balance.

Assessing the timescale of change

Most of these tests do rely on the assessor knowing what was happening previously in order to measure any decline or improvement. While reliant on this factor, the tests are not presented to record and display this. If previous records are not available it is always worth asking “how has this changed in recent weeks”, the patient or their primary care giver will then be prompted, in an open manner, to elaborate. This will add depth to what you assess and better aid decision making and planning.

Knowing the patient well can be the most effective test of function, and GP and Community based staff have the advantage of interacting with patients outside of traditional clinical areas.

Subtly we see the changes in functional ability arise, often over longer time periods. A patient may stop driving one year, stop walking to the surgery the next and within a few years may be house bound. Identifying these step changes and understanding the multifactorial causes is a vital part of the challenge that is CGA . Evidence shows us that intervening at these times of step changes can help to slow a loss of function and with the right therapies, exercise and goal setting, we can see some reversal and ultimately the patient may regain some physical function.

Social and environmental assessment

Social and financial circumstances have a direct impact on physical and mental wellbeing. They influence patients' ability and inclination to comply with medical advice and the frequency of attendance in primary care and the emergency department. Most health care consultations are done out of the patient's home and without the next of kin or informal carers present. It is vitally important that health care professionals are aware of a patient's social situation and support structures in order to best tailor their advice and support.

We human beings are social beings..... We survive here in dependence on others. ...there is hardly a moment of our lives when we do not benefit from others' activities....most of our happiness arises in the context of our relationships with others."

Dalai Lama XIV

Social Assessment has historically been the domain of Social Workers. Health Care professionals have tended to ask a few perfunctory questions and move on. How often have you seen a social history comprising one word "married"? We need to be more mindful of patients' social circumstances and the effects they have on their mental and physical wellbeing, compliance with advice and frequency of contact with the health services. GPs are constrained by time and may not be the best people to collate social and financial information about a patient. This can easily be done by the patient themselves, a well-informed carer, a nurse or health care assistant or indeed a social worker working as part of the Multidisciplinary team. There are examples of the voluntary care sector undertaking Easy Care assessments of patients to feed back to Primary Care.

There are a huge number of different 'social assessments' quoted in the literature but they are difficult to access and some are copyrighted. They all ask essentially the same questions which have been collated in the BGS 'Social Questionnaire' and 'Environment Questionnaire.' Feel free to adopt and adapt to your requirements.

Different models of assessment

The medical profession is very wedded to the idea of assessment as asking a series of pre-determined questions – the so called 'Questioning Model' – whilst Social Care organisations have increasingly adopted an assessment of the individuals needs and wishes using the patient as the driver for the exchange – the 'Exchange Model'. Social work and nursing assessment practice emphasises the importance of independence and quality of life when establishing needs and thus is a person-centred activity.

Questioning Model: in the context of the questioning model the assessor set this agenda and is seen as the expert.

Exchange Model: the assessment process is embarked upon as a share enterprise and the individual is respected as the expert on his/her own situation.

Further information

Barthel Index. For further explanation of the Barthel Index see [King's College](#).

See also Collin C, Wade DT, Davies S, Horne V (1988), The Barthel ADL Index: a reliability study, Int Disabil Stud. 10(2):61-3.

Nottingham Extended ADL Scale.

For those concerned about older people's safety when driving:

**When it's time to stop driving and
In the driving seat
DVLA Assessing fitness to drive
Age UK.**

Psychological components of CGA

There is a high prevalence of mental health issues in older people so Comprehensive Geriatric Assessment is not complete without addressing these.

As part of a holistic assessment it is vital to consider mood and cognition. Assessing these is described below.

Mood

Depression in older people has a prevalence of 5-10 per cent in those aged over 65, but is frequently under-recognised. It is associated with higher morbidity and poorer outcomes from physical illness. Older people under-report symptoms of depression, and may attribute them to the effects of ageing. Somatic symptoms are more common than in younger people with depression.

Assessing mood, looking for depression, requires close observation of expression and affect during the conversation. Evidence of psychomotor retardation is often present in older people with depression but can be missed if there are other reasons for this such as Parkinson's Disease. Likewise older people presenting with weight loss, poor sleep or increasing pain with stable physical issues could well have a depressive illness and this needs to be considered.

Simple screening questions which might help include:

- During the last month, have you often been bothered by feeling down, depressed or hopeless?
- Do you ever sit and cry for no reason?
- Do you worry about the future and what it might hold?
- During the last month, have you often been bothered by having little interest or pleasure in doing things?
- Do you feel lonely?

However, people are often embarrassed to admit these things in front of others and it is usually more fruitful to ask these questions during the physical examination when perhaps family and carers are not in the room.

If indicated, it might be helpful to proceed to a more formal depression assessment – potential tools include the Geriatric Depression Score (see Further information, below). This is validated for older people with no, mild or moderate cognitive impairment.

Diagnosing depression in those with significant cognitive impairment is a diagnostic challenge, and specialist referral is usually required. Some symptoms of depression such as tiredness, weight loss and psychomotor retardation also occur in dementia. A history of the symptoms from an informant may be helpful.

Older adults with depression are at higher risk of completed suicide than younger people, so specific enquiry into suicidal thoughts should always be made. Risk factors for suicide in older people include:

- Older age, male gender.
- Social isolation and or bereavement.
- History of attempts and or evidence of planning.
- Chronic painful illness or disability.
- Drug or alcohol use.
- Sleep disorders.

Cognition

It is a useful approach to use the social aspects of the assessment conversation to judge whether or not there is a possible issue with cognitive dysfunction. It is important to have a low threshold of suspicion as many people with dementia have learned to cope with day to day social questions despite significant cognitive deterioration.

Often a simple screening question addressed to the patient and/or family and/or carers can be a useful introduction to the subject. One such question is: has the person been more forgetful in the last 12 months to the extent it has affected their daily life? For example, difficulty using the phone, managing shopping lists, using money, managing their medication, driving, etc.

The rate of decline is important to distinguish delirium from dementia. Cognitive decline which is rapid and which has taken place over days to weeks as opposed to months or years is more likely to represent delirium.

The progression (smooth or stepwise) may differentiate the type of dementia suspected.

If there are grounds for suspicion that dementia or mild cognitive impairment may be present, most older people are then happy to undertake a more formal assessment of their cognitive function.

The GP-Cog test takes about 5 minutes to complete and includes an informant interview.

Although the Hodkinson Abbreviated Mental Test Score (AMTS) is a useful and fast screening test, it was developed in hospital based care and can miss executive dysfunction. It has never been validated for use in primary care.

More detailed assessment of cognition can be done with either the Mini Mental State Assessment (Folstein) however its use is subject to copyright. It also does not examine executive function in detail. The Montreal Cognitive Assessment which is available free of charge after registration has been developed to detect mild cognitive impairment in many conditions.

Further information

[Geriatric Depression Score](#).

[GP-cog test](#).

[Montreal Cognitive Assessment](#).

Assessing cognition in Older people - Alzheimer's Society document: [Helping you to assess cognition. A practical toolkit for clinicians](#).

Medication review in CGA

Medication review is a core component of CGA. Older patients with multiple comorbidities can have indications for multiple medications, some of which may be based on sound, relevant evidence, but others may do more harm than good, particularly in combination.

The evidence base for guideline based prescribing may not be directly relevant to frail older people or those with significant comorbidity (as such people are unlikely to have been represented in trial participants). Further, even established medications may no longer be useful as diseases may have run their course, physiology may have changed, or the reason for their prescription may have been to treat another drug's side effect (e.g. amlodipine given for a single raised blood pressure, causes ankle swelling which is treated with furosemide, which causes urinary frequency treated with tamsulosin, which causes dizziness treated with betahistine).

Finally, many medicines are given for long-term risk reduction (e.g. hypertension, renal disease in diabetes, lipid lowering), which may be less relevant to patients with a limited lifespan, and their use may not reflect current priorities.

Judicious review of medications, their indications, side effects, benefits and interactions can cause significant and rapid improvements in a patient's condition. This doesn't always involve stopping medication, indeed increasing doses to effective levels or treating patient priorities such as limiting pain may be highly beneficial, or checking whether the medication can actually be taken or not might be particularly useful (e.g. inhaler technique, ability to put in eye-drops, frequency of PRN use). Below is a schema for a general approach to medication review (it is thorough but depending on prescribing complexity can be completed in 5-10 minutes), plus some validated tools to add rigour to the process.

1 Obtain full medication history

- a. Primary care prescription
- b. Pharmacy dispensation history
- c. Prescribed medications from other providers (e.g. private healthcare, from abroad)
- d. Other medications taken (e.g. leftover tablets, medicines prescribed for others)
- e. Herbal supplements, vitamins etc
- f. Illicit drugs

2 Review medication use: in general and for each medication

a. In general:

- “Are you good at remembering your pills?”
- “Can you swallow them OK?”
- “What are you most concerned about with your tablets?”

b. For each medication:

- “Do you take this?”
- “How often?”
- “What for?”
- “Do you think it works?”
- “Does it have any side effects?”

3 Review full drug list for pharmacological interactions or common side effects

The STOPP list (see below for details) or equivalent is useful here, as well as the BNF or e-prescribing decision support to check for interactions. This will guide further questioning.

4 Obtain sufficient medical history

Obtain sufficient medical history and current disease status to assess appropriateness of prescribing and patient understanding, e.g.:

- If on anti-anginals: “How often do you get angina?”
- If there is a previous history of stroke: “You’re not taking a blood-thinner. Do you know why that is?”
- If on painkillers: “This tablet is a painkiller. What type of pain do you use it for? Does it work?”
- If possible issues identified eg on STOPP: “Do you suffer from constipation?”

5 Review each medication

Review each medication for appropriateness given the medical history. The MAI can be useful here, at least as a framework for evaluating the key issues related to each medication

6 List and prioritise

List and prioritise medication-related issues and discuss changes with the patient

- a. Any high-risk prescribing should be changed urgently
- b. Patient priorities are very important to both guide the process and build trust
- c. Changes should generally be introduced progressively over time unless there is a significant, urgent problem
- d. New medications should also usually be introduced one-by-one (to avoid confusion if prescribing or de-prescribing causes new symptoms)
- e. Reduce old medications gradually if necessary to avoid rebound effects (physiological or psychological dependence) and introduce new medications gradually too – start low and go slow.
- f. Arrange to assess progress and, if necessary, make further changes in the future.

Further information

NO TEARS tool

The **NO TEARS tool** was developed in primary care and is said to be possible within a 10 minute consultation. It may therefore be a helpful part of CGA.

It comprises a set of questions about an individual as follows

- Need and indication
- Open questions
- Tests and monitoring
- Evidence and guidelines
- Adverse events
- Risk reduction or prevention
- Simplification and switches.

STOPP-START

The **STOPP-START** decision aid is designed to support medication review particularly in older people. It consists of a series of rules/suggestions related to high-yield problems in prescribing for older people, both in terms of reducing medication burden (STOPP) and adding in potentially beneficial therapy (START). Short forms are being developed but are not yet published.

MAI

The **Medication Appropriateness Index** (MAI) is a framework for assessment of medications for older people. The MAI can be applied progressively to each medication to decide, individually and in combination with other medicines, whether the cost:benefit decision to prescribe the medication in question is appropriate. This tool is straightforward but painstaking as time needed increases progressively for each additional medication.

Creating a problem list for CGA

This guide outlines how drawing up a comprehensive stratified problem list can assist in creating the care plan and explains the steps to follow including any clinical tests to consider.

The Problem List should be developed in collaboration with a patient/±caregiver and be individualised and patient-centric, reflecting patients' concerns and those of their families. The creation of the list in full will help in the generation of the care plan.

The Problem List process is particularly helpful for structuring an approach to;

- Older patients with complex, multiple comorbid conditions
- Those older people with conditions in need of collaboration between primary and specialists care
- Those older people in need of collaboration between different services
- Those with multiple needs (e.g. socioeconomic, health, safeguarding), often identifying interactive problems.

It can be initiated in any setting, at any stage of a frailty presentation, but it is important to recognise that problems and goals noted at the point of an acute illness or decompensation may differ from the list produced once the patient is stable and at home thus the Problem list and Goals may change/evolve over time.

In frailty, there can be more than one problem as patients often have varied and multiple problems (on average six), but the Problem List should help to identify all acute, subacute or chronic problems which may interact. The Problem List should also help with prioritisation so that acute and more serious problems (from the patient's point of view) are dealt with first.

However, setting goals and prioritising them may be difficult for various reasons, for example in a patient of advanced age with poor functional status, with dementia or with multiple interacting acute and chronic conditions, thereby turning the problems into 'works in progress', and underlining the need for continuing assessment.

When creating the Problem List, difficulties can arise in reaching the appropriate decision about which investigations/actions are necessary, or whether enough is being done for the patient. An important aspect of such decisions is to focus on the assessment of patients' competence or capacity. This will determine whether and how the other aspects of assessment/management/treatments are undertaken.

A summary sheet can be used to record an holistic assessment which will facilitate the generation of a problem list.

Using tests to manage problems

Unless tests are clearly inappropriate, e.g. the patient has refused them, the majority of older patients presenting with new health or functional problems should be investigated as guided by the signs/symptoms of ill health. Investigations should initially be confined to

those that are simple, inexpensive, easily performed and not distressing, for which the results are almost instantly available, resulting in high yield.

Such tests include:

- Urea (be aware that middle range can represent severe dehydration in older patients),
- Creatinine (be aware that low muscle bulk can mask poor renal function and that there are limitations of the Cockcroft-Gault equation for calculating eGFR in older patients when diagnosing and staging kidney disease, this overdiagnosing Chronic Kidney Disease (CKD)).
- Electrolytes(be aware sodium <125mM/L can cause confusion and tiredness; sodium <115mM/L can cause seizure, coma, death). Be aware that rate of change is important also. Some people run a chronically low sodium of around 125 which is unlikely to be causing symptoms.
- Glucose(be aware of higher risk of hypoglycaemia in older patients, due to the age associated decrease in the autonomic response to hypoglycaemia).
- Liver Function Tests (be aware that Paget's disease should only be considered if elevated alkaline phosphatase in otherwise normal liver function tests. It could also be elevated for weeks after a sustained fracture).
- Calcium, C Reactive Protein (CRP), Thyroid Function Tests (be aware of sick euthyroid syndrome during acute illness. Also, if hypothyroid older patient is successfully treated, but clinically not feeling better, consider further tests for concomitant autoimmune conditions like pernicious anaemia, Addison's disease),
- Chest Radiography (CXR),
- Electrocardiograph,
- Urinalysis (asymptomatic bacteria does not necessarily indicate urinary infection but new onset incontinence should be investigated with urine culture).
- Full Blood Count. Haemoglobin (Hb) levels gradually decline from the age of 60. Around 20 per cent of older patients are anaemic due to disease, and they may also suffer from marrow suppression (myelodysplasia). Also, fluid overload can cause fall of Hb level as can fluids in a previously dry patient. Further discussion and decision about investigating an older patient with anaemia should depend on clinical problems, symptoms, past medical history, severity of anaemia, particularly the rate of Hb fall (a recent significant change should usually mean urgent investigation), and MCV results (micro-, macro- or anaemia of chronic disease-normocytic, normochromic), where the investigations should not depend only on the absolute level of Hb. Be aware that some older patients suffering with malabsorption (e.g. due to coeliac disease with low iron, folate, B12) could have a dimorphic blood picture thus appearing to have a normal mean cell volume (MCV) – this means checking haematinic levels is always useful in any anaemia. In patients with a normal MCV whose haematinic levels are within the normal range; anaemia of chronic disease is the most likely cause. The commonest cause of this is chronic kidney disease, but don't forget wounds of any type, including leg ulcers, chronic inflammatory disease and malignancy. It may be appropriate to consider further tests such as blood film, TFT, urine analysis, LFT, bone profile , immunoglobulins and – in men – PSA.
- Erythrocyte Sedimentation Rate (ESR) can be useful for monitoring/screening some conditions in older people. It is usually very high (>90mm/hr) in the following conditions: giant cell arteritis, metastatic cancer, chronic infection and

paraproteinaemias. However, in patients older than 70 years, values of up to 35 mm/hr for female and 30 mm/hr for male patients can be normal.

Decisions about any further investigations should usually not be rushed at the first presentation/assessment and without the available results of the initial investigations. Often a short period of observation may be necessary, particularly for ascertaining the patient's ability to consent and to tolerate further investigations, and her or his suitability for the treatment.

Moving on to further tests

Ordering further investigations without careful weighing pro- and contra- arguments for each decision in a frail, older patient, with multiple comorbidities, may result in distressing, time-consuming, expensive, unnecessary and even harmful investigations/assessments. For example non-intentional weight loss of 5% in a period of one month or 10% over 6 months in an older patient is usually worrying, but the general rule for ordering further investigations should be the consideration of investigations that will alter management of the patient. This does not necessarily mean offering a curative procedure such as a surgical intervention – it could simply mean establishing suitability for palliative radiation. Another focus of the investigation/assessment could be the determination of prognosis and its consequence for the patient: good or bad (e.g. reassuring the patient and family or focusing them on advanced planning). It is important to determine what the focus of the investigations is – prior to referral for the tests.

It should be borne in mind that several tests are usually not well tolerated or are difficult to perform in older patients: 24-hour ECG tape (in a confused patient and often in someone who is not confused but poorly mobile), Exercise Tolerance Test (e.g. poor mobility), Bowel preparation and Colonoscopy (e.g. risk of dehydration and perforation).

Care and support planning in CGA

This guide in the series on Comprehensive Geriatric Assessment provides a reference guide to care and support planning for primary care and community clinicians, with emphasis on the care of older people living with frailty. It explains what personalised care and support planning is, the recommended components, tips for developing a Care Plan, with a list of resources to help clinicians and patients engage in personalised careplanning.

What is care and support planning?

The Royal College of General Practitioners defines personalised care and support planning as:

"A powerful way of creating an environment which helps clinicians to support self-management by patients of their own long term condition."

However a more holistic definition comes from the new NHS England Service Component [Handbook](#) on personalised care and support planning:
‘Personalised care and support planning is an essential gateway to better supporting people living with long term physical and mental health conditions, and carers, helping them to develop the knowledge, skills and confidence to manage their own health, care

and wellbeing. It helps individuals and their health and care professionals have more productive conversations, focused on what matters most to that individual.'

The term 'personalised' reflects that the conversation relies on equal input from the individual and their carer, where appropriate, alongside health and care practitioner(s), and looks at the individual's health and care needs within the wider context of their lives. 'Care and support' signals that people need more than medicine or clinical treatments and that social, psychological needs and support to do things for themselves are equally important, alongside opportunities for community inclusion and support.

The essence of personalised care and support planning is:

- A conversation between an individual (including their family/carer when appropriate) to discuss life priorities, consider options and agree goals.
- Working with the individual to identify the best clinical treatments and/ or social and psychological supports for them, taking account of their life priorities and the agreed goals.
- Agreeing the actions individuals themselves will take to help them achieve their jointly agreed goals and the supports they may need to do that.
- Recording the conversation in a way relevant to the individual.
- A planned and continuous process, not a one-off event.

There is a drive for care plans to be more widely implemented; the NHS Mandate includes a commitment that by April 2015:

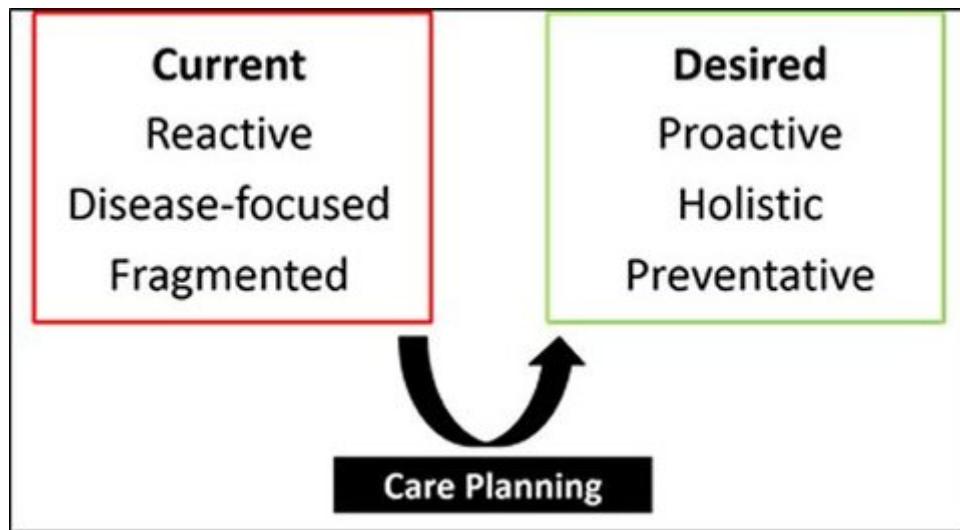
"Everyone with long-term conditions, including people with mental health problems, will be offered a personalised care plan that reflects their preferences and agreed decisions."

The NICE Guidance for Older People with Multi Morbidity published in September 2016-recommends a care plan reviewed annually.

Why is it vital?

One of the most important challenges facing the 21st century NHS is the need to improve the treatment and management of long-term conditions, multi-morbidity and support and care for older people living with frailty. Part of the problem relates to how our models of care tend to be structured. Traditional models of care, which focus on the management of single long term conditions, do not fit the paradigm of care required for those living with multi-morbidity and frailty. It is recognised that change is needed. The term 'house of care' has been adopted as a central metaphor in NHS England's plans for improving care for people with long-term conditions - care planning has been recognised as being at the very heart of this process of driving change (Figure 1, below).

In an age of austerity, it is worth noting that evidence suggests personalised care and support planning can produce the most appropriate use of limited healthcare resources.



What should a care plan include?

The diagram below summarises nine key areas that ought to be included within a care plan for a frail older person.



Key steps to developing an effective care plan

Figure 2 displays four steps to developing a care plan that are identified in the National Voices Guide to Care and support planning.

It is critical to highlight that, despite the simplicity of the diagram, this process should be both collaborative and continuous. Furthermore, it is not intended to be prescriptive, but to stimulate thinking.



Goal setting and action planning

It is important to emphasise that care planning is much more than solely preparing for when a patient's condition deteriorates. A more pro-active, positivist outlook on care planning is to consider care plans as a way of empowering patients to maintain or improve their health - central to this process is goal setting. Traditionally, goal setting has tended to remain within the medical paradigm; that is the goals themselves have tended to focus on treatments, medications or test results. Effective care plans, that improve health and well-being, require goals that are based on patient's personal targets and should link to functional outcomes that they want to achieve.

Two contrasting examples of goal setting are shown in Figure 3 below.

Figure 3: An example of goal setting and action planning for a patient with recurrent falls (adapted from Personalised care and support planning handbook, Coalition for Collaborative Care):

Instead of	The plan should read
Need: Fall prevention Goal: Prevent A&E attendances Action: Attend physiotherapy appointments once per month	Need: I need to build up my muscle strength to assist with balance Goal: To be able to use the stairs without needing any assistance Actions: Doctor to refer me to a physiotherapist; I will discuss strengthening exercises with my physio; I will join a weekly walking group

Goal setting in this manner has a number of advantages, particularly in the context of older patients living with frailty. Firstly, it encourages patients to articulate what matters to them and thus drives more patient-centred care. Secondly, this approach can help to simplify decision making in patients with multiple morbidities by focussing on outcomes that span conditions and aligning treatments toward common goals.

It is also important to recognise that in the context of frailty, by definition, things can change or take a turn for the worst. The care and support plan might usefully include pointers for an individual and their carers as to what action to take if this happens so as to avoid further rapid deterioration, reduced function and ultimately loss of independence. This Escalation plan could range from a very medical issue, such as what action to take if weight is gained rapidly (suggesting fluid retention and deteriorating heart failure) to a problem with care ('What I should do if the carers haven't turned up?') or to a more personal issue ('What I should do if I don't feel well enough to go to the exercise class?'). Giving individuals support in considering these possibilities can lead to an increased sense of control and confidence in the support structures.

A care and support plan for an individual living with frailty should also include the actions which the individual might wish to be taken in the event of a crisis such as a fall, an inter-current illness or any other situation where an ambulance or out of hours doctor might be called. This Emergency Care plan or Urgent Care plan will document what the professional and the individual have discussed is probably right for that person in the event of a crisis. Of course it is not always possible to predict exactly what will be needed, but thinking about whether hospital admission is appropriate after they have fallen, or whether the patient would rather be at home if they had a life threatening illness, in advance of the situation will provide valuable guidance to the emergency health professionals at the time of the crisis. It also helps to document the individual's usual observations if they might be relevant to the issue. For example, someone with idiopathic Parkinson's disease who has persistently low blood pressure and who has falls is more likely to be taken into hospital unnecessarily (and to their detriment) after a fall, if the ambulance crew are not aware that a systolic BP of 90mmHg is normal for that individual.

Tips for goal setting

Drawing on the mnemonic 'SMART' may result in more effective goal setting:

- Specific: both the goal and the action plan (which must be explicit - who will do what and when?).
- Measurable: consider how we can help people to track whether they are achieving their goals (Diary? Checklist?)
- Achievable: Patients and clinicians must ensure that goals remain within the realms of achievability given the patient's clinical situation. To assess this, it is worth asking patients to grade their confidence in achieving their aim using a scale of 1-10.
- Relevant: to the patient and their situation.
- Timely- as in, is it possible to make a difference in a relevant time frame and when should things be reviewed.

Involve carers and family (when relevant) with these discussions, since they can play a significant role in this process:

- They can help with the construction of achievable goals.
- They may be an active participant within the required actions.
- They may be required to help provide ongoing motivational support to the patient.

Involving Social Services in CGA

A comprehensive assessment needs to consider the impact of social factors on the health and wellbeing of individuals and vice versa. The connections between their social circumstances and improved health outcomes and a sense of wellbeing may not be visible to the individual, nor to the professionals unless there is a full picture and joint development of the care and support needs, considering all the interdependencies and the wishes of the individual.

Closer integrated working with Health and Social Care would enable information sharing - saving time and reducing the consequences of poor communication. Putting the patients and their informal carers at the centre of this assessment and allowing sharing of the information with any health and social care professional with whom they come into contact should be supported. This would create a truly patient-centred resource and stop the repetition of information giving that is a frequent source of discontent amongst patients and their carers.

Readers need to be mindful of the differences in the legislative frameworks supporting health and social care delivery across the 4 countries of the UK when reading this page. These have similar aims but differences, their application and levels of integration can influence the ease with which the delivery of a single assessment can be achieved. More information can be found about these frameworks below.

Regardless of the legislative framework there is a general consensus of what good practice in supporting people with frailty should look like.

With new duties being placed on health and social care, the development of integrated working with shared information systems and processes is essential. This may also require that professionals not only share information but trust colleague's information and begin to undertake some of each other's parts of the assessment where this makes sense.

The health and social care legislation differs in the four nations of Britain:

Wales

The **Social Services and Well-being (Wales) Act 2014**. Due to be enacted in 2016 after going through a range of consultations contains some distinct differences in duties around assessment and information.

Northern Ireland

Northern Ireland are making changes to their health and social care system under a program called **Transforming your care**.

Scotland

Public Bodies (Joint Working) (Scotland) Act 2014

- Nationally agreed outcomes, which will apply across health and social care, and for which NHS Boards and Local Authorities will be held jointly accountable
- A requirement on NHS Boards and Local Authorities to integrate health and social care budgets
- A requirement on Partnerships to strengthen the role of clinicians and care professionals, along with the third and independent sectors, in the planning and delivery of services
- Partnerships will be jointly accountable to Ministers, Local Authorities, NHS Board Chairs and the public for delivering the nationally agreed outcomes.

England

The Care Act 2014 (England) now places a statutory duty on local authorities to:

- Carry out an assessment of anyone who appears to require care and support, regardless of their likely eligibility for state-funded care.
- Focus the assessment on the person's needs and how they impact on their wellbeing, and the outcomes they want to achieve.
- Involve the person in the assessment and, where appropriate, their carer or someone else they nominate.
- Provide access to an independent advocate to support the person's involvement in the assessment if required
- Consider other things besides care services that can contribute to the desired outcomes (e.g. preventive services, community support).

Use the new national minimum threshold to judge eligibility for publicly funded care and support.

Further Reading

See [NICE guidance](#) regarding social care needs for older people with one or more long term conditions.