



**Clinical
Oncological
Society of
Australia**

**COSA GERIATRIC ONCOLOGY WORKSHOP:
Assessment tools for Australian clinical practice and
research**

**16 November 2009
Gold Coast Convention and Exhibition Centre
Broadbeach, Queensland**

CONTEXT

Australia's population is growing, and ageing, rapidly. It is estimated that within 50 years around one in four Australians will be aged over 65 years.¹ Accordingly, the incidence of cancer – for which age is the most common risk factor – is predicted to rise dramatically in the coming decades.

The median age of Australians diagnosed with cancer is 67.8 with 44% of patients aged over 70 at diagnosis.² Australians over 65 have about 10 times the incidence of cancer and 15 times the cancer mortality rate of younger people.

Management of cancer in older people is complicated by other factors such as physiological changes that occur with ageing and the possibility of multiple co-morbidities. Some tumours may be more indolent in older patients; others may be worse.

There is growing recognition of the need for a more evidence-based and consensus approach to the assessment and management of older people with cancer. However in Australia we do not have routine, protocol-based care for older cancer patients and there is still little interaction between the disciplines of oncology and aged care.

The Clinical Oncological Society of Australia (COSA) has established a Cancer in the Elderly Interest Group to promote the need for a more strategic approach to managing cancer in older Australians. In April 2008 COSA convened the first major workshop in Australia on this topic – '[Where geriatrics meets oncology](#)' – attended by more than 70 participants from the fields of oncology and geriatrics.

COSA's Geriatrics Oncology Group convened this workshop to consider and develop recommendations for the use of a geriatric assessment tool or tools in clinical practice and in research to improve the management and care of older people diagnosed with cancer.

¹ Australian Bureau of Statistics. *Population projections, Australia, 2006 to 2101* (cat. No. 3222.0). <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/3222.0Main+Features12006%20to%202101?OpenDocument> (Viewed December 2009).

² Australian Institute of Health and Welfare (AIHW). *ACIM (Australian Cancer Incidence and Mortality) Books*. AIHW, Canberra, 2007.

WORKSHOP PURPOSE AND OVERVIEW

The original promoted aim of COSA's second geriatric oncology workshop was to define a national geriatric assessment tool for the Australian clinical setting. However in pre-workshop discussion COSA's Geriatric Oncology Group acknowledged the absence of data to assist in evaluating and choosing one tool over another. Instead, workshop participants were invited to consider and recommend which tool or tools could best be used in clinical practice and research in the Australian setting.

In addition to members of COSA's Geriatric Oncology Group, invited participants included medical oncologists, radiation oncologists, surgeons, geriatricians, dual medical oncology/geriatrics trainees, cancer nurses, pharmacists, palliative care specialists and others with an interest in improving the care of older people with cancer.

Dr Catherine Terret, a leading international expert in the field of geriatric oncology, was invited to help guide and contribute to workshop discussions. Dr Terret has extensive experience in the development of geriatric assessment tools and setting up geriatric oncology programs.

Dr Terret and several Australian oncologists and dual medical oncology and geriatrics trainees outlined:

- the current geriatric assessment tools used in other countries and in Australia
- essential components of an 'ideal' screening tool
- considerations in assessing and choosing a tool such as feasibility, coverage of geriatric domains, patient acceptability, patient category and tool validation.

Summaries of presentations follow.

Workshop participants then divided into three groups to consider and develop recommendations regarding the appropriateness and application of geriatric assessment tools:

- in tertiary hospital settings, with a multidisciplinary geriatric oncology team
- by private/independent/small group practitioners
- in research.

The workshop was supported by a COSA Clinical Professional Day grant.

This report was written by Lisa-Maree Herron, communications consultant and rapporteur, for COSA.

PRESENTATIONS

Introduction

Dr Christopher Steer, medical oncologist and chair of COSA's Geriatrics Oncology Group, welcomed participants and explained the rationale for and purpose of the workshop.

In light of predictions that the number of older patients with cancer is rapidly increasing, Dr Steer noted the need to better manage these patients. One of the main strategies to do this is to more formally assess older patients with cancer.

The two key questions to be addressed were:

- How do we assess older people with cancer in the Australian setting?
- How can we contribute to the emergence of better evidence about how to care for older patients with cancer?

Assessment in geriatric oncology

Dr Catherine Terret

Medical oncologist and geriatrician, Centre Léon Berard, Lyon, France

The aim of geriatric oncology is to improve the outcomes of elderly patients with cancer; to give optimal cancer treatment without negatively impacting on elderly patients' quality of life and functional status.

Dr Terret noted that cancer is a multifaceted disease, and ageing is not an even or homogenous process. The range of clinical and biological situations of elderly patients is very wide, so each patient must be assessed and considered individually.

Dr Terret described the key tools used for health status evaluation in older adults:

- Comprehensive Geriatric Assessment (CGA) – considered to be the 'gold standard'
- Multidimensional Geriatric Assessment (MGA) tools, namely:
 - Senior Adult Oncology Program (Tampa, Florida)
 - Multidisciplinary Assessment of Cancer in the Elderly (MAC) (Pavoda, Italy)
 - Multidimensional Geriatric Evaluation (Lyon, France)
- Screening tools, for example:
 - Vulnerable Elders Survey (VES-13)
 - G8 (ONCODAGE study).

Dr Terret compared the tools to different levels of magnification: screening tools are like looking at patients with glasses; MGA, like using a magnifying glass; and CGA, like using a microscope.

Geriatric assessment tools

CGA is a three-stage process involving:

- identification or targeting of appropriate patients

- patient assessment and development of recommendations
- implementation of the recommendations by the physician and patient.

CGA has been proven to be more effective than standard medical care, but its efficacy depends on three conditions:

- a trained geriatric team
- specific location: geriatric units
- conception and active implementation of a geriatric intervention program and follow-up.

MGA evolved as a more practical tool that did not require the strong collaborations with geriatricians, which are not always possible in oncology settings. MGA tools are designed to detect older patients' problems that may interfere with cancer treatment by exploring the major domains of:

- physical and mental status
- social, economic and environmental situation
- functional status.

Administration of an MGA requires a trained multidisciplinary team. Dr Terret said ideally the team would include:

- Oncologist
- Geriatrician
- Psychologist
- Social worker
- Dietician
- Occupational therapist
- Pharmacist
- Care coordinator.

Each professional assesses the relevant domain and shares finding with the team. This leads to detection of unknown problems and more precise knowledge of the patient's co-morbidities and health status.

Effective **screening tools** are easy to administer, quick to complete, suitable for use in oncology clinics and do not require trained geriatric specialists. If screening is positive, the patient should be offered a more complete geriatric assessment. Screening tools tell us only if patient is 'fit' for standard cancer treatment or 'unfit' and requires further investigation (MGA or CGA).

The **VES-13** is designed to identify vulnerable elderly people by assessing risk of functional decline or death over a two year period. It can be administered as a brief telephone interview (<5 minutes). The result is a score from 0 (lowest risk) to 10 (highest risk).

VES-13 is the only tool that has been studied in the oncology setting. A pilot study comparing VES-13 with an MGA procedure (in 50 prostate cancer patients aged 70+, treated) has established its feasibility for detecting geriatric impairment in an oncology setting.³ Dr Terret warned that further studies are necessary to confirm the authors' conclusion that VES-13 performed nearly as well as conventional MGA in detecting geriatric impairment.

ONCODAGE study

³ Mohile SG, Bylow K, Dale W, et al. 'A pilot study of the vulnerable elders survey-13 compared with the comprehensive geriatric assessment for identifying disability in older patients with prostate cancer who receive androgen ablation.' *Cancer* 2007; 109(4):802-10.

Dr Terret outlined the ONCODAGE study, which aims to validate a screening tool to identify older patients requiring CGA. It is a national multicentre prospective study requiring 1650 patients. The study will compare the G8 scale, VES-13 and MGA (incorporating CIRS-G, ADL, IADL, MMS, MNA, GDS15, TUG, QLQC-30, social data). Eligible patients are aged 70 years and above, with certain tumour types, and in the first line of cancer treatment (curative or palliative intent).

Conclusions

Dr Terret recommended that health status assessment should be integrated in the cancer treatment decision-making process for every elderly patient.

A two-step process could be proposed:

1. Use a screening tool.
2. If result is positive, administer or refer patient for a CGA or MGA.

Further studies are needed to:

- identify the appropriate tool
- identify the appropriate target population (cancer characteristics, planned treatment)
- evaluate the cost-effectiveness of the procedure.

What are the choices?

Dr Lakshmi Venkateswaran

Advanced Medical Oncology Trainee, Westmead Hospital

Dr Venkateswaran presented the different measures and tools currently in use to inform discussion about whether there is one tool, or an adapted or modified one, that would meet the needs of Australian patients and their clinicians.

CGA is the gold standard, involving a 'battery of tests' that cover multiple domains. Its aim is to identify problems that would otherwise have gone unrecognised without a CGA, resulting then in formulation of a management plan and implementation of that.

Screening tools, on the other hand, should be short, quick, simple to do and identify patients as fit enough for standard treatment, too unwell or frail for treatment, or vulnerable and thus requiring further assessment.

In Dr Venkateswaran's view, a screening tool should:

- encompass the main geriatric domains – physical, functional, cognitive status, psychological health, co-morbidities, polypharmacy
- be feasible and practical to do in a busy oncology clinic
- be reliable
- be acceptable to patients (simple)
- supersede chronological age as the measure used to categorise older patients.

Dr Venkateswaran presented key findings from a **COSA survey** of medical oncologists and geriatricians regarding assessment of geriatric cancer patients conducted in the leadup to this workshop. Members of COSA, the ANZ Society of Geriatric Medicine and MOGA (n=1400) were invited to complete the web-based survey. There were 367 responses.

Key findings included:

- More than 82% of respondents agreed that a screening tool might assist oncologists seeing every older cancer patient (75.0% of Geriatricians agreed vs 87.5% of Medical Oncologists).
- More than 61% of respondents disagreed or disagreed completely that the results of a screening tool would be unlikely to influence the treatment decision of the oncologist (23.5% were neutral, and 16% agreed).

Dr Venkateswaran discussed the key elements of the four geriatric screening tools in common use:

VES-13

- 13 item function-based scoring system.
- Questions are very practical.
- Can be self completed and is easy to do.
- Quick – patients usually take 5-10 minutes to complete.
- Validated in prostate cancer⁴.
- Score of ≥ 3 identifies increased vulnerability.
- Does not include cognition or polypharmacy or co-morbidities.

SAOP (Senior Adult Oncology Protocol questionnaire)

- Series of questions with yes/no answers. If patient has altered status for any of these questions, it automatically warrants a more detailed evaluation.
- Activities of daily living (ADLs)/IADLs included.
- Includes an abbreviated MMSE (to assess cognition), self-rated health and quality of life scale and questions regarding number of medications, sleep and appetite.
- Completed by patient.

SAOP has been tested against other tests in the CGA and performed reasonably well: 91% Sensitivity, 44% Specificity⁵.

Adelaide screening tool

- Uses a patient-completed questionnaire.
 - Quite comprehensive – covers multiple domains.
 - Includes a pain scale and distress scale.
 - Assesses vision, hearing, falls, memory, nutrition.
 - Considers demographics and home environment.
 - Uses scoring sheets.
 - Referrals to appropriate services should be made depending on responses.
- Patients give consent for findings to be discussed by the multidisciplinary team.

Conclusions

Dr Venkateswaran said the ultimate goal of geriatric assessment is to identify and address problems that may otherwise be unrecognised and to formulate and implement appropriate management strategies.

Is there one ideal screening tool? Or should we combine elements of different tools for local practice? In relation to research, should we use one tool for use in prospective trials to study patient outcomes and tolerability of treatment?

⁴ Mohile SG, Bylow K, Dale W, et al. 'A pilot study of the vulnerable elders survey-13 compared with the comprehensive geriatric assessment for identifying disability in older patients with prostate cancer who receive androgen ablation.' *Cancer* 2007; 109(4):802-10.

⁵ Extermann et al. *Critical Reviews in Oncology/ Hematology* 2009; 69:183-185.

Is there a best screening tool? Essential components of an ideal tool

Dr Jonathan Hogan-Doran
Senior Palliative Care Registrar, Royal Adelaide Hospital and
Dual trainee in geriatrics and medical oncology

Dr Hogan-Doran reiterated the importance of an increased focus on geriatric oncology given Australia's ageing population. Cancer patients will increasingly be older, have multiple problems, be likely to live alone and less likely to have support, be more consumeristic (increased desire to be treated) and might have higher expectations.

A challenge in treating geriatric patients with cancer is that they are not homogenous. The ageing process and associated functional declines and increasing morbidity is highly individualised and not always reflected in chronologic age or the patient's appearance. Thus, the 'end of the bed' test may not be the best patient assessment.

Dr Hogan-Doran highlighted the 'evidence conundrum' – while most people with cancer are aged over 65, these patients are not participating in clinical trials. This may be because their clinicians are worried about their increased susceptibility to side effects (effect of chemotherapy regimens vs reserves – absorption, distribution, hepatic and renal clearance); about effect on their quality of life; about polypharmacy (increased drug-drug interactions) and about impact of treatment modalities. In the absence of evidence, most older patients are not receiving chemotherapy, largely due to clinician concerns about the likelihood of response to treatment and benefit and older patients' susceptibility to complications because of physiological changes (renal, liver, bone marrow, non-haematological toxicity) and/or co-morbidities.

The dilemma of screening: Who? Why? Which?

Dr Hogan-Doran said a good screening tool should identify someone in a pre-clinical state, using a relatively simple test, in order to take action that will improve their quality of life.

In considering **who**, we need to consider whether screening is limited to certain population groups, stage specific (curative vs metastatic) and/or cancer specific?

Why screen? Is the aim to help determine treatment? Or, are we looking for other problems?

Which disease state/s are we screening for?

Assessment tools

A meta-analysis of 28 controlled trials of **CGA** (4959 general elderly patients) found that it was effective in:

- reducing hospitalisation
- decreasing medical costs
- improving functional status
- prolonging survival⁶.

⁶ Stuck AK, Siu AL, Wieland GD, Adams J, Rubenstein LZ. Comprehensive geriatric assessment: a meta-analysis of controlled trials. *Lancet* 1993;342:1032-6.

But Dr Hogan-Doran noted that CGA was only effective if assessment was followed by appropriate management. CGA is an assessment and management tool and process; just finding the problems doesn't make them disappear.

Despite demonstrated outcomes of CGA, there are problems. Most research has been done in general geriatric populations (not cancer specific populations). The effectiveness of CGA is reliant on a 'geriatric environment': it requires people with geriatric skills, needs to be done in specific geriatric units (inpatient assessment units, geriatric assessment and rehabilitation units) and specialist geriatric interventions and follow-up are required. CGA is time consuming and resource and staff intensive. And the question for oncologists is how many of the problems identified by CGA are going to make a significant difference to the quality of life and outcomes for the patient?

Hence, alternative tools have been developed for oncological populations:

- Complex:
 - Multidimensional Geriatric Assessment (MGA)
 - Recording / grading of problems in the main geriatric domains.

- Simple:
 - Uni-domain or pauci-domain 'screening tools'
 - Refine on PS or KPI or ECOG
 - Derived from large datasets e.g. GAP
 - Derived from MGA datasets e.g. G8.

MGA is good at detecting patient problems likely to interfere with cancer treatment or alter survival by identifying problems in the main geriatric domains. There are several MGAs in practice, all starting with a comprehensive oncological assessment then adding other domains.

Dr Hogan-Doran said the holy grail for oncologists is a tool that will objectively determine a patient's status and enable them to allocate patients for treatment, e.g.:

- 'fit' and well patients – could be treated with a fair expectation that they would be managed similarly to younger patients
- 'vulnerable' patients – require a little bit more specialist input to optimise their treatment and outcomes
- 'frail' patients – require good supportive palliative medicine.

Geriatric oncology program at Royal Adelaide Hospital

Dr Nimit Singhal Medical oncologist, Royal Adelaide Hospital

Dr Singhal described the Royal Adelaide Hospital's geriatric oncology program, established in June 2008. The RAH established a multidisciplinary team (MDT) and geriatric oncology clinic to administer screening for all patients aged over 70 years, and coordinate interventions for a select population. The MDT includes representatives from medical oncology, geriatrics, palliative care, social work, psychology, pharmacy and a geriatric oncology nurse.

The program uses a self-administered screening tool (the Adelaide screening questionnaire), which is an abbreviated CGA. All medical oncology referrals aged over 70 years are mailed

the questionnaire or asked to complete it prior to their first appointment. The MDT reviews completed questionnaires at its weekly meeting (about 5 to 10 patients each week).

The questionnaire responses are used to score patients as fit, vulnerable or frail. This information is passed on to the treating oncologist to make a treatment decision i.e. all 'frail' patients are not immediately considered inappropriate for treatment. The MDT recommends interventions required and makes referrals e.g. to dietician (malnutrition) or pharmacist (polypharmacy).

The Adelaide screening questionnaire assesses:

- functional status (IADLs, physical functioning, KPS)
- psychosocial status, using a distress scale
- pharmacy
- frailty (weight loss, walktime, exhaustion)
- co-morbidities
- other domains including memory, vision and hearing.

At 6 November 2009 the program had screened about 300 patients, with a median age of 76 (range of 70 to 97). The mean time for patients to complete the questionnaire was 17 minutes (5 to 60 minutes) and 84% reported full satisfaction with the length, style, completion and clarity of the questionnaire.

Key findings:

- The average number of medications taken by a patient was 4.3.
- 90% of patients had limited physical functioning.
- 30% had impaired social status.
- 20% had impaired psychosocial status.
- 55% need assistance (IADLS).
- 61% were defined as 'vulnerable' based on their responses.

The screening questionnaire had proven to be:

- effective in revealing various issues in the geriatric patient population
- an appropriate model for a busy oncology practice with support of allied health staff
- suitable for research (clinical/lab) and training in this population.

Onco-geriatric assessment tools at Sir Charles Gairdner Hospital

Dr Andrew Kiberu

**Senior Registrar in geriatric medicine, Sir Charles Gairdner Hospital and
Dual trainee in medical oncology and geriatric medicine**

Dr Kiberu described a study conducted at Sir Charles Gairdner Hospital to validate use of **VES-13** in a newly established medical oncology clinic for patients aged over 80 years.

VES-13 was selected as the screening tool to assess because it is encountered most in the literature, and is the tool recommended in the *NCCN guidelines for Senior Adult Oncology* and is common in the geriatric oncology literature, but there is little validation data despite apparent widespread use.

A screening tool was selected rather than a full CGA because of lack of resources (personnel and funding) and the need for a short and simple assessment that could be used in a busy oncology clinic. The introduction of screening had necessitated ongoing negotiation with the hospital's Department of Geriatric Medicine because it revealed problems that required interventions.

As noted by previous presenters, VES-13 has been validated in a study of 50 prostate cancer patients⁷. Reliability of VES-13 was 0.92.

This study was a cross sectional observational study. New patients aged over 70, with a newly diagnosed cancer and no previous cancer treatment, were followed up for six weeks or two cycles of chemotherapy.

A research nurse obtained informed consent and conducted the assessments:

- VES-13, followed by CGA and SAS on the same day at baseline
- VES-13 and SAS repeated at one week for reliability
- VES-13 and SAS at each of two subsequent chemotherapy visits or six weeks
- mini-COG done simultaneously with MMSE
- MNASF done simultaneously with MNA (Nestle).

Summary scores for each tool were scored dichotomously as Impaired/Not impaired using standard published guidelines.

Dr Kiberu presented study results including:

- comparisons of CGA models
- VES-13 validation
- VES-13 reliability
- MNA validation
- mini-COG validation
- modelling combinations of tools.

The study found that frail patients are more symptomatic and that VES-13 predicts impairment. Study conclusions include:

- The overall predictive ability of screening tools is limited.
- VES-13 has limitations in this patient group.
- VES-13 appears to 'measure' impairment on CGA (impairment in at least two out of 8 domains).
- VES-13 is reliable.
- The MNASF is predictive of MNA impairment.
- The mini-COG is not a sensitive predictor of MMSE; the sensitivity of ECOG was very poor.
- Interactions between short screening tools need further study, particularly VES-13, MNASF and ECOG. Combining the three resulted in a definite change and improvement in sensitivity.
- An MNA-derived screening tool needs further study.

Dr Kiberu concluded that a CGA still remains the standard recommended screening tool in older patients with cancer. While VES-13 is 'better than nothing' further research is needed to better understand its applications and whether combining with other tools will improve its usefulness.

⁷ Mohile SG, Bylow K, Dale W, et al. 'A pilot study of the vulnerable elders survey-13 compared with the comprehensive geriatric assessment for identifying disability in older patients with prostate cancer who receive androgen ablation.' *Cancer* 2007; 109(4):802-10.

WORKSHOP GROUP DISCUSSIONS

Workshop participants were divided into three groups to consider and develop recommendations regarding the choice and application of assessment tools in different settings:

1. Private/independent/small group practice

What tool is most useful and practical for an oncologist working alone or in a small group practice or setting?

2. Multidisciplinary teams

Can the Adelaide model be applied at other teaching hospitals? Would it be practical and valuable?

3. Research

Given the absence of data, what sort of research is needed and feasible? Which tool/s should be recommended for use in geriatric oncology research?

Private/independent/small group practitioners

The group identified several barriers to the use of a geriatric assessment tool by oncologists who were sole or private practitioners or working in small group practices and made recommendations for addressing these.

Barrier or issue	Detail/recommendations
Before the patient gets to the oncologist 'pre-screening' is already done.	<ul style="list-style-type: none"> • Increase General Practitioners' awareness of appropriate screening approach and that there are now better tools for assessing geriatric patients with cancer.
Absence of funding for comprehensive assessment (by oncologist).	<ul style="list-style-type: none"> • Patients could be referred to GP for pre-treatment assessment before seeing medical oncologist. • COSA to develop communication to GPs recommending that if they have a patient over the age of 70 diagnosed with cancer they consider doing a health assessment [noting that MBS item is for patients over 75 only]. • Inform GPs of the opportunity to use allied health funding for older patients e.g. provide referrals to dietician or psychologist in private practice or employed in clinics. <p>OR</p> <ul style="list-style-type: none"> • Oncologists could conduct a short screening

	<p>test then refer patients back to their GPs for Older Person's Health Assessment (MBS item 700) and development of care plan. (But will GPs have time and interest to do this?)</p> <ul style="list-style-type: none"> • Lobby for item number for oncologists to conduct MGA? But still barrier of GPs' limited time. A nurse could be employed to do the MGA. • Suggest lowering the age of the existing GP item number to age 70?
Perception that assessment is unnecessary.	<ul style="list-style-type: none"> • Promote increasing evidence of validation and benefits of assessment tools to practitioners.
Most tools are not quick and easy to administer. Tools that are short are not adequate.	<ul style="list-style-type: none"> • For example, co-morbidities are difficult to define accurately; prognostic information is not particularly accurate.
Practitioners are unsure what to do with screening results; referral pathways (if they exist) are not clear.	<ul style="list-style-type: none"> • Increase nurse involvement (even by telephone) and/or use of cancer care coordination models. • Cancer Care Coordinator specifically for older patients.

The group suggested the Adelaide screening questionnaire could be used in a private group oncology practice. Patients could complete the questionnaire in the medical oncologist's waiting room prior to their first appointment. The medical oncologists would then review the results as a team.

Dr Brian Stein from the Adelaide Cancer Centre shared his experience in using the Adelaide screening tool in a medical oncology practice. The patient's completed questionnaire is scored by a medical oncologist, who then makes appropriate referrals based on responses. He said the use of the screening tool had highlighted conditions or considerations that might otherwise have been missed, and that his colleagues said use of the tool had a 'substantive influence' on their decision-making. The questionnaire enabled busy oncologists to quickly identify priorities, which was helpful in determining approach to treatment.

Geriatric cancer assessment by multidisciplinary teams

This group concluded that it would recommend adoption of an assessment tool such as the Adelaide screening questionnaire and formation of a geriatric oncology MDT in tertiary centres. However key challenges in many hospitals would be lack of resources, including geriatricians' time, time and support for MDT meetings and accessibility of specialist staff to do follow-up assessments.

Recommendations

Issue	Recommendations/details
Establishing a MDT	<ul style="list-style-type: none"> • A geriatric oncology nurse is an essential member of the MDT, to coordinate the team and referrals. • The MDT should also include a social worker, palliative care, dietician and geriatrician. • Start with a 'core' MDT and then build up membership in response to needs. • It is essential that the services to which geriatric patients will be referred can respond adequately – there is no point making referrals if there are three month delays.
Evaluation of Adelaide screening tool	<ul style="list-style-type: none"> • There needs to be further evaluation of the Adelaide screening questionnaire to determine if it is the best screening tool and validate its components and usefulness. • Components of the questionnaire need to be regularly reviewed. For example, it was noted that the nutrition assessment is adapted from MNA which has been validated in the general population, but there is a more cancer-specific tool available that might be more appropriate. • Outcomes for screened patients need to be evaluated, including management implemented, treatment received, tolerance and morbidity.
Measuring outcomes	<ul style="list-style-type: none"> • Centres considering introducing a screening tool and MDT should measure current outcomes in geriatric oncology – such as patient referrals, interventions, outcomes; establish a baseline to measure if use of a screening tool makes a difference.
Referral to geriatricians	<ul style="list-style-type: none"> • Use of a screening tool can reduce referrals to geriatricians by limiting referrals to those patients in need of a CGA. • Sometimes referrals are made but patients don't see the geriatrician, often because of limited availability of geriatrician. It was suggested that to

	address this problem geriatric trainees could be placed on rotation with the MDT to see patients more urgently.
Geriatric oncology centres	<ul style="list-style-type: none"> Dual geriatrics/oncology trainees are best placed in major teaching hospitals to be champions and facilitators of the MDT approach and help develop geriatric oncology 'centres'.

Research

This group determined that the ideal research question would be in adjuvant disease setting for patients over 70 years old. They recommended a study designed to evaluate whether the result of a geriatric assessment tool affects patient outcomes including survival, toxicities, etc. Does the result of the research tool correlate with the oncologist's decision-making process and recommendation?

Issue	Recommendations/details
Study methodology	<p>The group suggested 'blinding' the treating doctor to the result of the screening tool: medical oncologist or treating physician should assess the patient (as usual) and decide on treatment plan; patient would also be assessed using a screening tool.</p> <p>Study investigators would have to select one or a few tumour streams, and link with the relevant cooperative clinical trials groups to carry out the trial.</p> <p>The group recommended a self-administered questionnaire could be mailed to patients, but noted potential issues including:</p> <ul style="list-style-type: none"> - failure to complete properly - validity of patient completing the questionnaire themselves - loss of follow-up. <p>A sub-study could consider impact of patient's wishes and personal factors/issues.</p>
Which tool?	The group primarily considered the Adelaide screening questionnaire vs the SAOP tool (shorter; can be done via phone rather than

	<p>face-to-face).</p> <p>It was suggested that in order to progress research 'keep it simple'; 'pick a tool, any tool', and have patients do the assessment at their first appointment with the medical oncologist.</p>
When and where to recruit and screen patients?	<p>Patients would need to be screened ideally before they see the medical oncologist for the first time. Timing of assessment needs to be considered as performance status of elderly patients in adjuvant setting can change quite remarkably.</p> <p>Patient could be identified from surgical referrals ('sometimes easier said than done') and/or referrals from MDTs (noting that not all patients are discussed by the MDT).</p> <p>To increase the number of trial participants and address issues of patients being screened out (by GPs or surgeons), it was suggested that the trial could be stratified, to include patients with metastatic cancer as well.</p>
Consent and ethics	<p>The group noted that a potential negative outcome of the study would be identification of a group of patients that the treating oncologists considered too frail or unwell for treatment when the assessment tool indicates they were 'fit' for treatment.</p>

It was suggested that the outcome to be assessed is not survival, but whether an assessment tool can help homogenise patients into three groups:

- patients fit for treatment
- patients unfit for treatment
- patients who need further assessment or doctors need to proceed with care because of identified conditions or factors.

Dr Terret suggested it would be valuable to study the impact on geriatric patient outcomes if supportive care is added to cancer treatment. For example, what impact does a post-operative intervention such as home visits and/or phone follow up by nurses have on outcomes for vulnerable and frail patients?

CONCLUSIONS

Professor Martin Tattersall summarised key outcomes and recommendations from the group reports:

- The Adelaide screening tool seems to be very practical, appropriate and beneficial, but needs further evaluation.
- The availability of a MBS item number (700 – Older Person’s Health Assessment) for assessing and developing a comprehensive care plan for older patients should be promoted to GPs and medical oncologists.
- COSA to consider advocating for lower eligibility age for patients for a health assessment to 70 (currently 75).
- A subgroup of COSA’s Geriatric Oncology Group should further develop the research proposal outlined by the workshop group, in consultation with the relevant cooperative clinical trials groups (like the PoCoG model).
- Given the absence of evidence on which to base a decision about which screening tool to use, can we simply choose one and add a couple of things to it or do we have to use one of the tools that exists? Why not follow the typical Australian approach and ‘just get on with the job’?
- There needs to be greater involvement of oncology nurses and cancer care coordinators to enhance geriatric oncology and patient care.

Professor Tattersall said the workshop had highlighted the need and enormous opportunities to improve the management of geriatric oncology patients in Australia, and had generated lots of ideas that COSA’s Geriatric Oncology Group would now pursue.

Appendix 1: List of workshop attendees

Title	Name	Name	Position/Specialty
Dr	Diana	Adams	Staff Specialist
Dr	Pretoria	Bilinski	Medical Oncologist
Dr	Bjorn	Burgher	Resident Medical Officer
Ms	Kate	Burns	Research Fellow
Ms	Naena	Chima	Cancer Information Nurse
Ms	Tandy-Sue	Copeland	Senior Clinical Pharmacist
Ms	Alison	Davey	Registered Nurse
Ms	Catherine	Debono	Staff Development Nurse
Dr	John	Eather	General Practitioner
Dr	Katherine	Field	Medical Oncology research fellow
Ms	Merran	Findlay	Oncology Dietician
Dr	Gerado	Guitar	Cytopathologist
Ms	Jill	Harrington	Nurse Unit Manager
Dr	Jon	Hogan-Doran	Medical Oncology/Geriatrics trainee
Dr	Baerin	Houghton	Medical Oncology Registrar
Dr	Elizabeth	Hovey	Medical Oncologist
Ms	Mikaela	Jorgensen	Surgical Outcomes Research Centre
Dr	Steven	Kao	Clinical Research Fellow

Dr	Andrew	Kiberu	Medical Oncology Geriatrics trainee
Dr	Laurence	Krieger	Advanced Trainee
Dr	Ganessan	Kichenadasse	Medical Oncology trainee
Dr	Martin	Kennedy	Senior Staff Specialist
Dr	Alan	Landau	Medical Oncologist
Ms	Jude	Lees	Pharmacist
Ms	Kristin	Linke	Clinical Service Coordinator
Mr	Brett	Ly	Pharmacist
Dr	Gavin	Marx	Medical Oncologist
Dr	Sandy	McCarthy	Senior Lecturer
Ms	Joanne	McNaughton	Biopharmaceutical Specialist
Dr	Linda	Mileshkin	Medical Oncologist
Dr	Emad	Mohareb	Pierre-Fabre
Dr	Byeongsang	Oh	Medical Oncology research fellow
Prof	Jane	Philips	Professor of Palliative Care, Notre Dame University
Dr	Janet	Prouse	Geriatric Oncology Nurse
Prof	Robert	Prowse	Geriatrician
Ms	Amanda	Robertson	Clinical Practice Consultant
Dr	Amitesh	Roy	Advanced Trainee
Dr	Nimit	Singhal	Medical Oncologist
Dr	Brian	Stein	Adelaide Cancer Centre

Dr	Christopher	Steer	Medical Oncologist
Dr	Bin	Sun	Pfizer, Australia
Prof	Catherine	Terret	Medical Oncologist
Prof	Martin	Tattersall	Medical Oncology
Dr	Timothy	To	Geriatrician
Dr	Lakshmi	Venkateswaran	Advanced Medical Oncology Trainee