

Research Paper

Australian healthcare professionals' experiences and perception of management of older adults with cancer: A qualitative study

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ABSTRACT

Introduction: Older adults with cancer make up a large proportion of cancer diagnoses in Australia. Multimorbidity and aging-related vulnerabilities can make cancer treatment and management challenging. There are limited qualitative studies exploring current practice of care and use of geriatric assessments (GAs) in Australia. This study aimed to qualitatively explore Australian healthcare professionals' (HCPs) experiences of treatment decision-making in relation to older adults with cancer and perceptions of the role of GAs in cancer care in Australia to identify potential barriers to implementation.

Materials and Methods: Australian HCPs providing care for older adults with cancer completed a short online survey and participated in a semi-structured telephone interview exploring their perceptions and experiences of treatment decision-making, and management of older adults with cancer. Purposive sampling ensured representation across disciplines. Thematic analysis using a framework approach identified key themes.

Results: Thirty-one HCPs ($n = 19$ medical HCPs, $n = 7$ cancer nurses, $n = 5$ allied HCPs) completed the online questionnaire. Most participants rated assessment of geriatric domains to be important/very important when considering treatment decisions, however there was variability in perceived importance for assessing objective measures of function and mobility. Of the 31 participants that completed the questionnaire, 29 participated in a semi-structured telephone interview. Qualitative analysis of interviews revealed four main themes: (1) Who do we consider older? Chronological vs. functional age, (2) Clinical management of older adults – theory vs. practice, (3) Is there value in geriatric assessments? (4) Factors that impact GA implementation, and one overarching theme (5) Treatment decision-making for older adults with cancer.

Discussion: This study provides insight into current practice of care for older adults with cancer and the barriers and facilitators to GA implementation within Australian cancer services. Health economic research demonstrating cost-effectiveness of GAs to facilitate system-level change is required. There is also need for further education and training for Australian HCPs on geriatric principles and assessments to improve management for older adults with cancer.

1. Introduction

In Australia, adults aged 60 years and over are estimated to make up 72 % of new cancer diagnoses [1]. This number is expected to grow in alignment with rate of cancer incidence and population demographic change [1,2]. Cancer treatment decision-making is often complex as older adults require consideration of impacts from comorbidities or geriatric syndromes [3,4]. This is compounded by under-representation of older adults in cancer clinical trials [5,6]. Given heterogeneity in

health and functional status among older adults [3] and the limited clinical evidence related to treatment impact and efficacy for this population [5,6], treatment decision-making is often based on clinician judgement rather than standard protocols [7].

To help guide treatment decision-making [8], multiple international organisations such as the American Society of Clinical Oncology (ASCO) [8], National Comprehensive Cancer Network (NCCN) [9], and International Society of Geriatric Oncology recommend using formal assessments to guide decision-making. These geriatric assessments (GAs)

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can identify underlying health vulnerabilities [10] that may impact on treatment of older adults with cancer [11]. Randomised controlled trials have demonstrated that use of GAs resulted in a reduction in grade 3 or more chemotherapy-related toxicity [12], improved quality of life [13], increased communication about age-related concerns, and patient satisfaction with care [14]. Given these benefits, integration of GAs in routine cancer care is recommended [15].

Despite reported evidence and international recommendations [8,9,16], there is low uptake of GAs to guide clinical decision-making [17–19]. An international survey conducted by the ASCO Geriatric Oncology Task Force of cancer providers found half (53 %) were aware of the ASCO Geriatric Oncology guideline, but only 21 % were routinely using GAs [17]. Similarly, 19 % of respondents of a survey of Australian medical oncologists used geriatric screening tools as part of routine practice [18]. An audit across six Australian cancer services found geriatric syndromes were only documented 24 % of the time and mentioned in only 10 % of multi-disciplinary discussions [20]. Further understanding in the Australian context of clinical decision-making for care for older adults with cancer is important to identify how best to integrate GAs into routine cancer care.

This study aimed to qualitatively explore Australian HCP's experiences of treatment decision-making in relation to older adults with cancer and perceptions of the role of GAs in cancer care in Australia to identify potential barriers to implementation.

2. Methods

2.1. Design

We used a qualitative design, with semi-structured interview data supplemented by quantitative demographic and clinical practice data.

2.2. Participants

This study recruited Australian HCPs (such as oncologists, nurses, geriatricians, allied healthcare professionals [physiotherapists, psychologists, social workers]) working with older adults with cancer. Oncology participants were recruited through mailing list or newsletters of health professional organisations (e.g., Clinical Oncology Society of Australia, Psycho-Oncology Cooperative Research Group) and via authors' professional networks with study information available via an online link or QR code. As there are few specialist geriatric oncology services in Australia, geriatricians who may receive referrals from oncologists were recruited via the Australian and New Zealand Society of Geriatric Medicine. Purposive sampling was undertaken to ensure representation across disciplines for HCPs.

2.3. Ethics

Ethics approval was received from the University of Sydney Human Research Ethics Committee [2023/384].

2.4. Data Collection

Consenting participants completed an online survey for demographic and clinical practice characteristics and were asked to indicate the GA domains listed in the NCCN⁹ recommendations they typically (formally or informally) assessed when caring for an older adult with cancer and to rate the perceived importance of each domain to their clinical decision-making, using a five-point Likert scale (Not at all Important to Very Important) (Supplementary File 1).

Participants consented to a semi-structured telephone interview conducted by a trained qualitative researcher (SH) to explore older adult treatment decision-making experiences and the perceived role of GAs in their clinical practice. (Supplementary File 2 and 3). A constant comparative approach [21] was used and the interview guide was

refined based on subsequent interviews.

The interviews were audio-recorded and transcribed verbatim using Trint software [22].

2.5. Data Analysis

Demographic and clinical practice characteristics data were descriptively analysed.

All interviews were coded in Nvivo12 [23]. Qualitative data was analysed following the framework analysis from Gale et al. (2013) [21]. Both inductive and deductive codes were used to code the data. Two researchers (SH and JS) initially coded five transcripts and developed a coding framework. The coding framework was then applied to a further nine transcripts by two researchers (SH and JS). As no discrepancies between the two coders were identified, a single researcher (SH) applied the framework to subsequent transcripts. This reviewer met with a second reviewer (JS) who had read all the transcripts to discuss the coding and make iterative changes to the coding framework as necessary. This approach to analysis aligns with Gale et al., (2013)'s framework methods [21]. Coding was discussed on an ongoing basis with the wider team. Thematic analysis was conducted by two researchers (SH, JS) in consultation with the wider authorship team. Themes were generated through deductive (i.e., themes generated based on the research aims) and inductive (i.e., themes generated from unrestricted coding of the data) approaches.

3. Results

Thirty-three participants consented and 31 completed the online survey. Most were oncologists ($n = 9$) or geriatricians ($n = 9$) followed by cancer nurses ($n = 7$). Most participants were female ($n = 20$, 64.5 %) and they had an average of 15 years of experience in their roles (range 3–27 years). Demographics and clinical practice characteristics are shown in Table 1.

3.1. Quantitative Data

Most participants rated assessment of all eight geriatric domains to be important/very important when considering treatment decisions (Fig. 1). However, perceived importance and domains regularly assessed as part of current practice differed (Fig. 1).

3.2. Qualitative Data

Twenty-nine of the 31 participants participated in a telephone interview. Mean interview duration was 34 min (range 14–49 min). Qualitative analysis of interviews revealed four themes: (1) Who do we consider older? Chronological vs functional age, (2) Clinical management of older adults – theory vs practice, (3) Is there value in geriatric assessments? (4) Factors that impact GA implementation. These themes underpinned an overarching theme: (5) Treatment decisions for older adults with cancer (Fig. 2). Quotes are presented by participant ID and profession [i.e., geriatrician (G), oncologists (Onc), cancer nurse (CN), other].

Theme 1. Who do we consider older? Chronological vs. functional age

To understand individual treatment decision-making practices, participants were asked to indicate when age was a consideration in their decision-making. Most participants indicated that they considered patients aged around 65 or 70 years as an older adult. In line with wider health system policies and high multimorbidity among First Nation Australians [26], some participants considered 'older' to be 55 years. Age definitions were reportedly based on cut-offs applied at a service level, or support systems that were available for an older adult. Health disparities in First Nations Australians occur due to systemic

Table 1

Healthcare professionals survey participants: Demographic and professional characteristics.

	Mean (range)	SD
Age	44.10 (29–64)	10.18
	N	%
Gender		
Female	20	64.5
Male	11	35.5
Role		
Geriatrician	9	29.0
Oncologist	9	29.0
Cancer nurses (include nurse practitioners)	7	22.6
Other healthcare professionals	6	19.4
Country of birth		
Australia	17	54.8
Other	13	41.9
Missing	1	3.3
Languages spoken at home		
English	29	93.5
Other	2	6.5
Aboriginal or Torres Strait Islander		
Yes	0	0
No	29	0
Works within cancer service		
Yes	27	87
No	4	13
Practice setting		
Public	19	61
Private	1	3
Mix	7	23
Education or certification in geriatric oncology*		
Yes	4	18
No	18	82
Education or certification in oncology ^{&}		
Yes	4	44
No	5	56

SD, standard deviation.

* Based on $n = 22$ clinicians, allied health.[&] Based on $n = 9$ geriatricians.

discrimination and historical injustice [24]. Systematic barriers within healthcare systems such as the lack of culturally safe healthcare services and inadequate healthcare funding for services that are affordable and accessible for those in regional or remote areas, exacerbate health disparities for First Nations Australians [25]. Understanding and awareness of these disparities is important to ensure equitable care.

“I generally consider, over sixty-five. So over retirement age... We don't have a fixed criteria, but that's what I would consider an older adult to be just in general, in services [it] is generally sort of early sixties to mid sixties - retirement age” (HCP25_Other).

However, many acknowledged the need to consider patient health status such as functional status, presence of comorbidities, and frailty – not just chronological age.

“Based on age, probably would go for a cut-off of over seventy or seventy-five. However, in that definition, I would possibly be a little bit flexible... For example, if they're on multiple medications or they had a number of other medical problems or received significant assistance with their activities of daily living.” (HCP29_Onc).

Theme 2. Clinical management of older adults – theory vs practice

Despite acknowledging aging-related considerations, many participants reported no difference in their clinical practice when managing older adults with cancer. Changes in patient management were ad-hoc, based on individual clinician judgement, concerns about cognitive impairment, comorbidities, or polypharmacy, or due to “change in their status” (HCP07_CN) such as deconditioning. Prompting by family members was also highlighted as a factor influencing referral for geriatrician review.

“...it's [management] the same, so essentially there's no routine difference between a younger and older patient... And it's not something, I necessarily flag to other staff members, but I think that everyone sort of has it in their mind ...” (HCP27_Onc).

“...if there's concerns when the patient initially presents to me...I'd be referring to geriatrician, particularly if there's capacity concerns and cognitive impairment concerns.” (HCP26_Onc).

Subtheme 2.1 When are GAs being used?

Most participants reported they did not use GAs or geriatric-specific screening tools in the treatment decision-making, although a few noted that GAs had been used in a research context but did not continue beyond the project. Participants who reported using a GA as part of a research project described nurse-led models involving a two-step process of screening followed by discussion of the assessment during multidisciplinary team (MDT) meetings. If warranted, referrals were made to relevant allied health or to geriatricians for further review.

“...so it's screening them, doing a brief geriatric assessment, and I refer them onwards to allied health or to a full comprehensive geriatric assessment. Or I do external referrals for them through the community.” (HCP22_CN).

“...we have a geriatric screening done by a nurse... but that's in a trial... And that's not able to be replicated outside of clinical trials, because we just don't have the resources to be able to do that.” (HCP08_CN).

Theme 3. Is there value in geriatric assessment?

There were mixed perceptions about the value of the GA: some HCPs believed it provides additional information to guide and optimise treatment decisions, ensures unmet needs are addressed upfront, and identifies underlying health conditions or geriatric issues. Others were less sure of the value of GAs as they perceived that the information obtained through GAs did not add to the information typically used in current practice. One participant (HCP27_Onc) commented that for many of their colleagues geriatric oncology or supportive care may not be “top of their priority list.”

“So I feel that it's an important part ... difficult to implement. It needs a lot of resources, but I feel that doing this makes our initial treatment decision-making better, ...putting supports in place to address what they're going to need from a holistic perspective. and ... I feel that their survivorship care is automatically going to be better because they are addressing multiple facets to their health.” (HCP26_Onc).

“..., my personal thoughts are that it's usually it's pretty obvious when a person comes in the room what you're going to be able to do. if you've been doing it for years, you can just assess that out straight away without getting them to fill a whole lot of questionnaires” (HCP16_Onc).

Theme 4. Factors that impact GA implementation

HCPs commented on staff factors, patient-level factors, service culture, and resource availability as factors that may impede or facilitate GA implementation.

Subtheme 4.1 HCP awareness and understanding of what the GA involves

Most participants reported the need for education and training to clarify the role of screening through a GA to identify geriatric syndromes. A critical barrier to implementation of GAs in routine care was a lack of awareness of available geriatric clinics or services to support

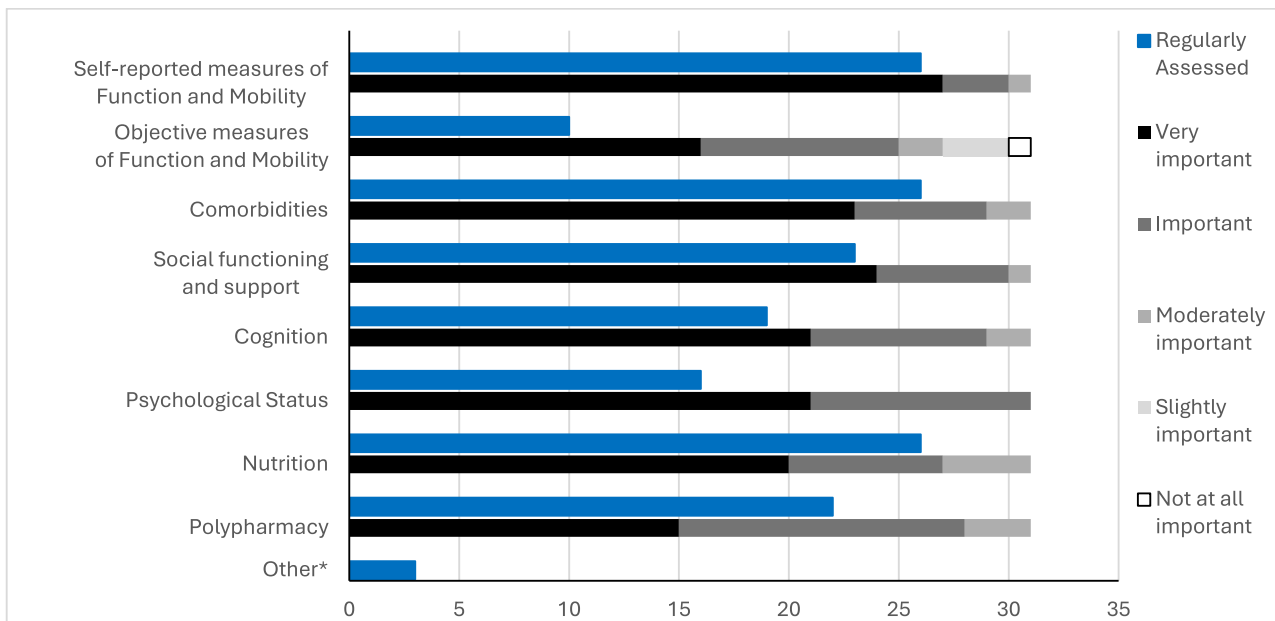


Fig. 1. Domains regularly assessed and perceived importance of domain assessment to assist with treatment decision-making.

*Other domains regularly assessed included: “all other parts of the CGA”, frailty index and symptoms.

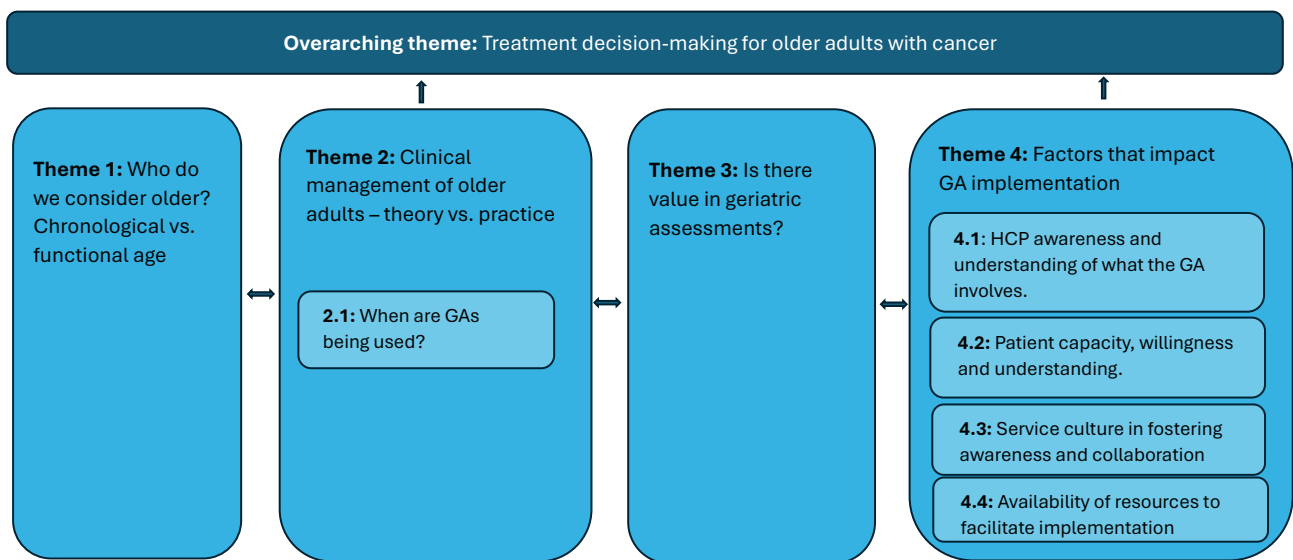


Fig. 2. Mapping of identified themes.

older adults with cancer. Education should incorporate local referral networks.

“I feel having nurses more aware of geriatrician[s] and the services they provide and what to look for in our geriatric patients would probably be the biggest assistance to it because right now a lot of ward nurses may not know key signs of the patients [that] require a geriatric assessment...I suppose more education... would be probably the most beneficial.” (HCP22_CN).

“I guess when we talk about barriers, one of them will be I just don’t know what happens next, like I understand the value of a geriatric assessment, but I don’t understand what the geriatric management is - that is any different to what we currently do?” (HCP28_Onc).

The role of geriatricians in GAs was reported to be unclear; in the Australian context, geriatricians are not embedded with oncology teams. For some geriatricians, being dual trained in palliative care and geriatrics assisted with understanding geriatric oncology considerations and being “more comfortable and familiar with malignancy” (HCP17_G). Others

were less confident in contributing to oncology treatment decisions and reported being “intimidated” (HCP03_G) by the range of potential treatments. Some geriatricians perceived that their roles were to highlight potential frailty or conditions that the patient may have which would inform or contribute to oncology treatment decisions.

“...I see my role as flagging someone’s highlighting frailty or medical conditions that might impact on their safety to have treatment and also sometimes communicating that or the patient’s wishes are which they might not be fully aware of.” (HCP01_G).

Subtheme 4.2 Patient capacity, willingness and understanding

Some participants reported lack of patient willingness or capacity to engage with geriatrician referral in addition to cancer-treatment related appointments. A couple of participants also mentioned patient comfort with discussing aging-related symptoms or a lack of understanding of GAs.

“...from the patient’s perspective... ‘Why do I need a geriatrician?’ ‘How

is this relevant to my cancer?'... 'I don't feel old enough that I meet the criteria to see a geriatrician.'" (HCP17_G).

"...patients may feel uncomfortable answering questions related to what they perceive to be older age vulnerabilities." (HCP04_Onc).

Subtheme 4.3 Service culture in fostering awareness and collaboration

Service culture was seen as both a barrier and facilitator to increased awareness and collaboration between geriatric and cancer care teams. Clear communication processes between geriatricians and oncologists, such as "weekly meetings with the oncologists" (HCP21_G), and oncologists with an interest in older adults to act as champions for greater geriatrician involvement, such as "getting additional geriatric input to improve outcomes" (HCP17_G), facilitated awareness and collaboration between disciplines. However, siloing between the two disciplines impeded collaboration. Two participants commented on potential "tensions" where clinicians may not want to "tread on other people's toes" (HCP05_Other). Geriatrician involvement in MDT meetings when treatment decisions were being made was identified as lacking and generally ad-hoc or as part of research.

"... I think also the current culture is also likely a barrier... as much as I would like it to be otherwise, a geriatrician is not part of the routine cancer care MDT. Our geriatricians, to my knowledge...don't attend MDTs so it often leaves geriatricians as after thoughts as opposed to core members of cancer care team." (HCP19_G).

Subtheme 4.4 Availability of resources to facilitate implementation

Participants commented that a triage process, screening tools, and a systematic, streamlined pathway would facilitate decision-making for older adults when initiating treatment. However, lack of resources and funding were common barriers to implementation of GAs. Practical barriers such as limited time within busy clinics, lack of dedicated space, and lack of dedicated staff were factors that influenced HCP's willingness to engage in formal GAs. Lack of availability or access to geriatricians and referral options following assessments, especially for patients living in rural or regional areas, were also perceived as barriers.

"I think the geriatric assessment is good...My only issue, is to do it properly can be fairly time consuming...sometimes the resources are not there, you can identify stuff, but then how do you follow up and implement stuff?" (HCP09_CN).

"...having a more streamlined approach or assessment – you know screening so that appropriate people are reviewed by appropriate clinicians prior to starting treatment in a timely fashion" (HCP08_CN).

Long wait times for geriatrician access, resulting in delayed results that could inform treatment decisions, was a barrier to geriatric input prior to treatment initiation.

"I think the big limitation or the reason that [cancer GA] doesn't happen in the general geriatric clinics, it's just purely time because the wait lists are so long... usually booked out six months in advance. So by then it would be far too late to do an assessment on an oncology patient." (HCP03_G).

Overarching Theme 5. Treatment decision-making for older adults with cancer

Fig. 2 depicts the relationship among the first four themes. Identification of "older adults" (Theme 1), impacts on clinical management for older adults (Theme 2), perceived value (Theme 3) and feasibility (Theme 4) of GAs in the Australian context. Participants reported that treatment decision-making was not based specifically on age, but rather on factors such as the type or stage of cancer; treatment intent (i.e., palliative or curative); treatment toxicities; patient health status, especially functional status and comorbidities; and understanding patient preferences. For oncologists who reported some form of GA (formal or informal), results were not explicitly discussed with patients during the treatment planning process. Some participants did report referrals for geriatrician review to determine patient suitability for treatment based on concerns about cognition, frailty, or multi-morbidity rather than a standardised approach based on age. Geriatricians perceived they were

only involved at a "crisis point" (HCP18_G).

"... the MDT recommendation is typically see your geriatric oncologist and it's not always fed back to the MDT after that decision has been made." (HCP04_Onc).

"I haven't seen referrals from an oncologist as a matter of routine saying "please see this patient because they have cancer and I'd like a geriatrician to see that as routine care" But we might get referred to patients saying this person has cognitive impairment and we're not sure if they have a cognitive diagnosis ... but they're not referred specifically because of their cancer." (HCP19_G).

4. Discussion

In this study, we reported HCPs' treatment decision-making in relation to older people with cancer and the perceived value and use of GAs. Though health status rather than chronological age was seen as important for treatment decisions and despite perceived importance of assessing geriatric domains, systematic processes for incorporating aging-specific considerations for the care of older people was lacking. Furthermore, consistent with other studies [17,18,27,28], we found limited use of GA tools in routine clinical care.

The perceived value of GAs was mixed. While some HCPs perceived potential value in clinical decision-making, others highlighted logistical and practical barriers to incorporating GAs within existing workflows and cautioned against duplication of current clinical decision-making. Whilst international organisations recommend using GAs prior to treatment [8,9,16], our results show that this did not commonly occur and, when GA did occur, results were poorly integrated into the treatment decision-making process. HCPs identified availability of and timely access to geriatricians as barriers for such input. In addition, participants who reported use of GAs, usually in a research context, had questions of sustainability once funding for the research has ceased. In line with previous research [29,30], oncologists and geriatricians in our study also reported working in silos – lack of understanding and communication impacted collaboration across disciplines.

The Clinical Oncology Society of Australia is currently developing guidelines for geriatric oncology [18]. We hope that these guidelines will increase awareness and perceived value of GAs in Australian cancer services. However, our study identified several barriers likely to impact feasibility of GA implementation. Consistent with previous research [17,18,29,31], these included lack of resources (such as time and funding), availability and access to geriatricians, and HCPs' awareness and knowledge of available tools.

Participants also identified that increased education, training, and systematic stepped care pathways as strategies that would facilitate uptake of GAs. Previous research has demonstrated that clinicians were more likely to use GAs if they were aware of guidelines [17]. To support patients' willingness and capacity to engage with geriatrician referrals, educational resources explaining the value of GAs tailored for patients are also required.

Given these barriers, improving GA uptake in Australia will require a multipronged implementation approach. Organisational commitment for practice change, including increased staff resourcing, is essential. Future research is also required to address implementation questions alongside demonstration of benefits and cost-effectiveness of GAs if practice change is to be supported by clinical teams. HCPs highlighted the need for service champions who are dual trained to foster collaboration and effective communication.

Whilst this study provided an in-depth understanding of HCPs' perceptions and practice around treatment decisions, there are some limitations. Self-selection bias meant that participants with more interest in or awareness of geriatric oncology may have participated in the study, so results may not represent views of all HCPs. Whilst race was not collected, we did collect country of birth and Aboriginal and Torres Strait Islander status. Although we have attempted to include multidisciplinary perspectives, we did not have surgical oncologists

participate in the study. Understanding surgical oncologists' attitudes towards management and use of GAs is important as surgery is an important treatment modality for solid tumours [32]. Post-interview participant checking was not conducted, but the interviewer sought clarification and asked questions to ensure understanding and accuracy during the interviews. Future research should also explore patient perspectives and acceptability of geriatrician referrals and GAs. Despite these limitations, we had broad representation of healthcare professionals working across different services across Australia.

5. Conclusion

This study describes Australian HCPs' and geriatricians' perceptions and current practice of treatment decision-making and management for older adults with cancer. Mixed perceptions towards the value of GAs emphasize the need for further education to increase awareness of GAs for Australian HCPs. Future research should also aim to understand how GAs can be incorporated into service workflows to facilitate use in treatment planning or decisions. Our findings add to the literature by providing a multi-disciplinary perspective on the value and current practice of care for older adults with cancer, and the factors that impact adoption of GAs within Australian cancer services. There is need for further research outlining the cost-effect benefits of GAs to facilitate buy-in and change from a health service system level and address factors that impact collaboration between oncological and geriatric disciplines to ensure tailored care for older adults.

Availability of Data and Materials

The datasets used in this study are available from the corresponding author on reasonable request.

CRedit authorship contribution statement

Concept and design: SH, MA, HS and JS.
 Data collection: SH.
 Analysis and Interpretation: SH and JS.
 Supervision: MA, HS, RL-P and JS.
 Manuscript writing: SH wrote first draft of manuscript. JS, HS, MA and RL-P made contributions to subsequent drafts.
 Approval of final article: All authors.

Ethics Approval and Consent to Participate

Ethics approval was obtained for the study from the University of Sydney Human Research Ethics Committee [2023/384]. Informed consent was obtained from all participants and verbal consent was re-confirmed prior to interview.

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Declaration of Competing Interest

The authors declare they have no competing interests.

Appendix A. Supplementary Data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jgo.2025.102234>.

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