



Priorities for the global advancement of care for older adults with cancer: an update of the International Society of Geriatric Oncology Priorities Initiative

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In 2011, the International Society of Geriatric Oncology (SIOG) published the SIOG 10 Priorities Initiative, which defined top priorities for the improvement of the care of older adults with cancer worldwide.¹ Substantial scientific, clinical, and educational progress has been made in line with these priorities and international health policy developments have occurred, such as the shift of emphasis by WHO from communicable to non-communicable diseases and the adoption by the UN of its Sustainable Development Goals 2030. Therefore, SIOG has updated its priority list. The present document addresses four priority domains: education, clinical practice, research, and strengthening collaborations and partnerships. In this Policy Review, we reflect on how these priorities would apply in different economic settings, namely in high-income countries versus low-income and middle-income countries. SIOG hopes that it will offer guidance for international and national endeavours to provide adequate universal health coverage for older adults with cancer, who represent a major and rapidly growing group in global epidemiology.

Introduction

In 2011, the International Society of Geriatric Oncology (SIOG) published the SIOG 10 Priorities Initiative to define the top priorities for the advancement of geriatric oncology worldwide.^{1,2} SIOG is the only global expert multidisciplinary organisation dedicated to the care of older people with cancer and the organisation created a document to guide policy making and develop education, clinical practice and research. This document has been favourably received by medical and political professionals and used in different jurisdictions worldwide.³⁻⁶ Since 2011, a substantial amount of progress has been made in geriatric oncology research. SIOG and other expert societies (eg, American Society of Clinical Oncology, European Society for Medical Oncology, and US National Comprehensive Cancer Network) have developed guidelines and consensus statements on the basis of current and relevant clinical research to provide evidence-based care for older people with cancer.^{7,8} The number of geriatric oncology programmes has increased, although in an uneven way. For example, some countries have multiple programmes in organised systems, whereas other countries have few programmes stemming from local initiatives and there is a large diversity of organisational models. Training courses, such as the SIOG Treviso course,⁹ have therefore been established.

Nonetheless, there is still a need to continue the development of initiatives to improve the quality of care for older adults with cancer, and to translate them into broad standards of care. The 2015 World Report on Ageing and Health¹⁰ estimates that the number of people older than 60 years will double by 2050. Additionally, over the past decade, as life expectancy has increased worldwide, chronic diseases, such as cancer, have become a major public health issue in high-income countries (HICs) and low-income and middle-income countries

(LMICs). Therefore, WHO has refocused its activities on non-communicable diseases. A key advance has been the Integrated Care for Older People guidelines coordinated by the WHO Department of Ageing and Life Course for implementation of patient-centred care.¹¹ In 2015, the UN adopted the 2030 Agenda for Sustainable Development, which includes 17 Sustainable Development Goals (SDG). SDG3 in this agenda addresses health issues. Several points are particularly relevant to the care of older adults with cancer (panel 1); therefore, SIOG recognised the need to update its 10 Priorities Initiative. SIOG deems it timely to invest in improving understanding of the SDG3 challenges and priorities, to catalyse integrated and collaborative efforts, to guide appropriate financial and human resources allocation, and to advocate for quality in cancer services for older adults within the goal of achieving Universal Health Coverage (UHC).

In this Policy Review, we discuss education, clinical practice, research, and collaborations and partnerships for geriatric oncology. Each section includes a reflection on how these priorities would apply in different economic settings, namely HICs and LMICs.¹²

Guideline development

An international multidisciplinary working group was established at the end of 2018 representing medical oncology, geriatrics, surgery, radiation oncology, anaesthesiology, nursing, and patient advocacy. Input was sought from international health organisations, professional societies, and patient groups. Expanding on the framework of the 10 Priorities Initiative, this SIOG Working Group consulted the SIOG 35 national representatives and various governmental and non-governmental organisations. The group had several in-person and virtual meetings. Working subgroups initiated drafts and priorities on the four main sections

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For the 35 SIOG national
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<https://www.siog.org/content/siog-national-representatives>

Panel 1: Extracts from UN Sustainable Development Goals document (goal 3: good health and wellbeing)

- By 2030, reduce premature mortality from non-communicable diseases by one third through prevention efforts, treatments, and promotion of mental health and wellbeing
- Achieve UHC, including financial risk protection, access to quality essential health-care services, and access to safe, effective, quality, and affordable essential medicines and vaccines
- Strengthen the implementation of WHO Framework Convention on Tobacco Control in all countries, as appropriate
- Substantially increase health financing and the recruitment, development, training, and retention of the health-care workforce in developing countries, especially in LMICs and small island states
- Strengthen the capacity of all countries, in particular LMICs, for early warning, risk reduction, and management of national and global health risks

LMICs=low-income and middle-income countries. UHC=universal health coverage.

(education, clinical practice, research, collaborations and partnerships). The manuscript was then integrated, reviewed, and went through several iterations until a consensus was reached (ie, until all authors agreed with the formulation of the priorities). This first draft was then circulated for a second round of external feedback, before finalising the present document. Where appropriate, we have drawn parallels with the SDG3 (panel 1). This Policy Review did not include a specific systematic review of literature. All SIOG national representatives, a large number of international organisations, and representatives of national health authorities were contacted. Their input was incorporated in the task force consensus work as above.

Education

Priority 1: integrate geriatric oncology into training programmes for health-care professionals

Health-care workers treating patients with cancer will be treating a growing number of older patients, therefore, a core set of required geriatric skills should be formulated and integrated into general oncology training programmes for physicians, nurses, and allied health-care professionals. Similarly, an oncology module should become an integral part of geriatric training. Key components of the education should include changes in cancer and patient biology and function with ageing, the value of a geriatric assessment as an effective tool for managing these patients, evidence-based personalisation of treatment options (including tumour and patient characteristics), and integration of patient-generated goals of care. The education should cover prevention, early diagnosis, management, rehabilitation, end-of-life

care for older adults with cancer, and understanding the physical, psychological, social, and financial needs of both the patient and family.¹³

Clinicians and researchers who are at an early stage in their career in geriatric oncology, including nurses and allied health-care professionals, should be supported through mentorships, international exchanges, and scholarships. SIOG and other international organisations should strive to establish educational global networks, programmes, and teaching collaborations between leading institutions in geriatric oncology that support less experienced institutions trying to initiate or develop a geriatric oncology programme (see priority 6 and priority 10).

Although the availability of resources can vary between HICs and LMICs, such training should be offered in each setting. Training programmes should be adapted to the local resources and needs and could leverage remote-learning opportunities that broaden the reach of centres of expertise.

Priority 2: provide educational material and activities on geriatric oncology for health-care professionals

Continuing education after completion of baseline professional education is a key training component to ensure an impetus for change in clinical practice. Educational activities should be directed to a broad range of health-care professionals. Geriatric oncology sessions and workshops should be promoted at national and international conferences to make training available to a large number of professionals. Training should be delivered at general oncology meetings, general geriatric meetings, and meetings specific to geriatric oncology. The key contents should include the items mentioned in priority 1. The training should take into consideration the patient and caregiver experiences and expertise. A strong patient advocacy educational component needs to be developed in communities and regions where such advocates are scarce, or do not exist.

In LMICs, resource-stratified adaptations might be required to surmount economic difficulties for attending educational meetings. One potential method is establishing so-called train-the-trainer partnerships, in which key individuals from an LMIC can train at established centres of excellence. After training, these individuals will be expected to return to their country of origin to develop and apply their new skills in that setting and become local educational leaders. Geriatric oncology experts can also be sent to LMICs to train key individuals who can then be trainers within their respective communities. Free educational opportunities for front-line community health-care workers are particularly relevant in LMICs because they can increase awareness about geriatric principles and strengthen the capacity of health-care systems to provide high-quality care for older adults with cancer.

Wherever possible, digital opportunities for education, including e-learning, online conference lectures, social

media, webinars, podcasts, web-based tools, and mobile apps should be harnessed to disseminate knowledge of geriatric oncology to the broader public. These strategies could prove particularly useful for clinicians working in LMICs, for whom attendance at courses or conferences might be challenging (eg, because of cost, travel, or language barriers). Translation of evaluation instruments and education materials in various languages should be promoted and strongly supported as a method to remove barriers to access.

Priority 3: educate the general public about the relevance of providing age-appropriate care for older adults with cancer

The global increase in average life expectancy is accompanied by improvements in the general health, function, and quality of life (QOL) of older people. However, successful ageing and opportunities for cancer management are not well-known to the general public, or even medical professionals, which can lead to stereotyping and discrimination (ie, ageism). Therefore, outreach to the general public and political authorities is needed. Maintenance of independence and the ability to meaningfully contribute to society are a core goal of age-appropriate cancer care. This requires educating the public on the occurrence of cancer and other chronic diseases in older people, the need for and feasibility of specific care in this population, the issues of under-treatment and over-treatment, and the specific needs of older adults. Additionally, efforts must be made to focus public messages on healthy ageing (eg, the active involvement of older adults in society) and that expenditure for the health and wellbeing of older populations represents an investment, rather than a cost. Research and care improvement actions need to be highlighted publicly through adequate communication channels, with specific aids (eg, wording, self-explanatory figures, hearing or visually impaired access), to reach out to the general audience, call for advocacy, and contribute to promoting age-appropriate care. Community education campaigns about the importance of understanding the needs of older adults with cancer and providing awareness of the risk of ageism in health care are essential components of a multifaceted approach to improve global awareness of this key issue.

Clinical practice

Priority 4: implementing models to provide optimal care for older adults with cancer

Multidisciplinary patient-centred care for all older adults with cancer is necessary to achieve optimum care. Although different non-exclusive models exist, teams organising care for older patients must include oncology and geriatric specialists. In some clinical health-care organisations, the geriatric expertise provided to the oncologists is part of the supportive care programme, whereas in other organisations it is fully integrated

within the oncology activity or established as a strong collaboration between departments or institutions. In other settings, the resources of telemedicine could be used for integrated tumour boards and consultations. Geriatric oncology principles (minimum standards) should be applied to older adults across all resource settings, regardless of stage in the cancer trajectory. These principles include the performance of geriatric screening, assessment of potential age-related problems, or both, and integration into the (electronic) medical record. The results of the geriatric assessment should help in making informed treatment choices (eg, by predicting the chance of severe chemotherapy-related toxicity)¹⁴ and guide integrated geriatric and supportive care interventions for any detected health problems. Shared decision making should include the patient and their caregivers.

The degree of integration of oncological interventions for older people and opportunities for geriatric care in the oncology setting will differ depending upon the resources available. Therefore, different approaches might be required in HICs than in LMICs. Similarly, practice size and setting need to be considered. Importantly, the definition of older age will differ according to the health-care setting in which it is applied.¹⁵ Use of concepts like the four M's (what matters, medicine, mentation, and mobility)¹⁶ can be useful in designing so-called age-friendly services, regardless of the resource setting.

The provision of optimal care for older adults with cancer will be achieved in age-friendly health systems that provide UHC for all, regardless of the patients' ability to pay. The financial coverage for a geriatric assessment by a geriatrician, oncologist, or an appropriate health-care provider should be promoted by state health policy as an essential health-care service for access to safe, high-quality, and effective treatment for older adults with cancer.

Priority 5: develop guidelines for the optimal treatment of older adults with cancer

The development of evidence-based guidelines specific to older adults with cancer is important to make clinical practice improvements regardless of the resource setting in which they are applied. SIOG produces resource-stratified and multi-disciplinary guidelines applicable globally for specific oncological diseases, strategies, and situations. These guidelines, or other geriatric oncology guidelines, should be applied in all clinical settings. Guidelines should recognise that care of older adults is multidisciplinary and be written for all clinicians in the cancer care team. Use of these guidelines should be monitored and updated regularly.

Guidelines should cover the whole spectrum of needs: treatment choice and management, toxicity prevention, approaches according to specific tumour types, geriatric assessment and interventions, rehabilitation, cancer screening and prevention, diagnostics, and survivorship.

These guidelines should highlight any available and relevant evidence specific to older adults with cancer. When recommendations are based on general clinical trials, they should acknowledge the insufficient amount of specific data for older people and highlight the need for constant therapeutic strategy adjustments, including the possibility of de-escalation. Furthermore, guidelines should highlight research gaps in evidence specific for older adults with cancer.¹⁷ Collaboration among international and national cancer organisations that produce highly acknowledged guidelines should be sought, aiming to incorporate the care of older people in all future general oncology guidelines. Discussions on meeting the needs of LMICs and underserved areas in HICs should be included, using the latest WHO Model List of Essential Medicines as a guide.¹⁸ Evidence-based proposals can be included beyond this list, particularly for high-benefit drugs of relevance for older patients.

Priority 6: establish centres of excellence for delivering clinical care, doing clinical and translational research, and providing educational opportunities

Progress made during the past two decades has led to the creation and implementation of highly successful geriatric oncology facilities worldwide, most of which are located in western Europe and North America. Numbers of these facilities should be increased and they should be integrated into geriatric oncology centres of excellence, which can provide high-quality clinical care and offer training and research initiatives as local and regional leaders. In HICs, the goal should be to implement these specialised units into all major academic medical centres. In LMICs, the initial goal should be to develop at least one such centre nationally. In some LMICs, oncology services at specialised tertiary-level cancer centres might exist and geriatric oncology expertise can be created. These facilities should build upon the experience from their counterparts in HICs and the initiatives and lessons learnt in other LMICs through collaborations that provide integrated people-centred health services. In other cases, a so-called train-the-trainer approach (see priority 2) can be used to develop geriatric oncology expertise with the development of the national cancer and geriatric infrastructure.

Research

Priority 7: improve the relevance of clinical trials to older adults with cancer

The highest priority for research in geriatric oncology in both HICs and LMICs is to improve the relevance of clinical trials for older adults with cancer. This population should be included in all clinical trials and enrolment from all ethnic and racial backgrounds must be promoted.

Older adults are under-represented in clinical trials and those who are included often belong to a relatively healthy subgroup because of restrictive eligibility

criteria.^{17,19–21} Older adults with low fitness and those with comorbidities are at an increased risk of having low tolerance for treatment or dying from causes other than cancer. Under-representation of these patients in trials could result in more toxicity or treatment-related complications and reduced treatment benefit compared with a younger, healthier study population. For optimal tailoring of care for older adults with cancer, it is crucial that the evidence guiding treatment decisions is expanded by broadening eligibility criteria of clinical trials.²² Older adult-specific trials (with or without randomisation, where appropriate) are needed when evidence from general trials is insufficient, in particular for patients with multimorbidity and frailty. Translational research should be included to understand the changes in cancer biology and host-tumour interaction with age, comorbidity, and ethnicity. If such trials are not feasible, representative cohort studies can be done provided that the appropriate methodology is used to gain meaningful and statistically sound information.

Additionally, integrating a geriatric assessment into clinical trials would provide an improved understanding of the health status of the study population and allow for subgroup analyses and stratified accrual using geriatric variables. Reaching a consensus on a core set of geriatric data to share systematically across countries and cultures would help to compare results and improve analysis and applicability of results to various settings. Potential sets could be the Geriatric Core Dataset (G-CODE) initiative led by the French Dialogue Intergroupe pour la Personnalisation de la prise en Charge en Oncogériatrie (DIALOG) intergroup,²³ the geriatric assessment used by the Alliance and American cooperative groups,²⁴ or by the European Organisation for Research and Treatment of Cancer.²⁵ Accrual could prove an issue irrespective of study design, therefore, encouraging older adults with cancer to participate in studies is an essential component for improving the evidence base in geriatric oncology.

Another important need is the inclusion of patient-centred outcome measures relevant to older adults, including patient-reported outcomes (PROs) and geriatric-specific outcomes.²⁶ Health-related QOL, cognitive and physical functioning, care dependence, and caregiver burden should be given equal importance to traditional outcome measures, such as efficacy and treatment-related toxicity, because for many older patients, maintaining QOL and independence are at least as important, if not more so, as survival itself.²⁶ Most research focusing on geriatric oncology and PROs has been done in HICs. Racial, ethnic, and cultural backgrounds can affect patient priorities and how various PROs are valued. Therefore, additional efforts should be made to define which PRO measures are most relevant in LMICs and across racially and culturally diverse populations. Finally, more research in humanities addressing social and personal aspects that determine trial and treatment participation should be done.

Trial design, feasibility, and the assurance of patient-centred goals can be greatly enhanced by the engagement of patients, caregivers, patient advocates and other stakeholders as partners in the research process. In the USA, the value of their inclusion is well documented in the experience of the Patient Centred Outcomes Research Institute and the National Cancer Institute National Clinical Trials Network Steering Committees, among other organisations.^{27–29}

Priority 8: evaluate the benefits of allocated treatments and co-management in improving treatment outcomes for older adults with cancer

Geriatric instruments (ie, questionnaires or in-person tests for health problems) and definitions of frailty for use in the oncology setting should guide treatment selection and interventions.^{30,31} Definitions of frailty try to identify key parameters that suggest a patient has a decreased functional reserve and is at increased risk of complications. Since the publication of the 2011 SIOG 10 Priorities Initiative, much work has been done in increasing the evidence base on the value of geriatric assessment in evaluating a patient's health status, identifying previously unrecognised health problems that might be relevant for treatment decisions, and providing an overall assessment of the amount of frailty.^{30,31} Additionally, multiple studies have shown that awareness of frailty and geriatric impairments often leads to changes in the oncologic treatment plan.^{14,32} Future studies should assess the effect of geriatric assessment and co-management on outcomes and their use for treatment stratification. In 2020, early results of four RCTs showing an effect on treatment tolerability, QOL, and hospitalisations were presented.^{33–36}

This research will require operationalisation and standardisation of geriatric instruments and definitions of frailty specifically tailored for oncology care. Although this research area is being increasingly investigated, we still do not have tools that solidly report frailty for use in oncology decision making. Frailty tools in oncology could also be different from frailty tools used in the general older population because of the underlying effect of the cancer (eg, the cancer-related inflammation vs inflammation in patients without cancer might be reflected by different sets of variables and thresholds for frailty definition purposes). For LMICs, these tools could also require cultural or linguistic adaptations of tools existing in HICs, or the development of novel tools or measurements adapted to local characteristics. Large randomised trials designed to show the effect of geriatric assessment-guided interventions in oncology remain a high priority. These oncology-specific data would also greatly improve the rate of adoption of geriatric principles in oncology care and establish the most effective ways to implement comprehensive management.

To study stratification strategies, trials are needed that compare treatment outcomes between geriatric

assessment-based allocation and standard treatment allocation (using clinical judgment, chronological age, and performance status). These trials could also include strategies that address optimal allocation of scarce oncological resources. Furthermore, such research should include the possibility of using multidisciplinary interventions aimed at issues identified by the geriatric assessment to improve the patient's health status, their ability to tolerate treatment, and treatment outcomes. Success in disseminating the value of geriatric assessment and management for older adults with cancer and in empowering and motivating the oncology community to use it will come only through such stepwise and well-defined research.

Priority 9: use personalised medicine technologies to improve cancer understanding and management for older adults

Harnessing the synergistic potential of basic and translational research in cancer and ageing is an important research priority. This research should aim to improve understanding of the interaction between cancer, treatment, and ageing—ie, how does age affect carcinogenesis and how does cancer treatment affect ageing. Furthermore, biomarkers of ageing potentially could be used to determine physiological reserve,³⁷ which is relevant to prognosis and treatment tolerance.

Big data analyses using artificial intelligence and machine learning techniques are required to identify patterns of ageing, comorbidity, and cancer that require tailored treatments. Omics tools provide opportunities for understanding cancer and ageing on a cellular and organism level; however, big data and real-world data could be used to increase understanding of these processes on a population level. It remains essential to combine these types of data with clinical information derived from geriatric assessments so that all relevant domains are considered. Big data could be used to provide real time case references for treating older adults with complex cancer and comorbidity presentations. Data from wearable technologies could provide unique opportunities to track treatment responses of older adults with cancer and design targeted interventions. Integration with large epidemiologic datasets (eg, data from the Global Burden of Disease studies) could further enhance public health approaches to this issue.¹⁵

Collaborations and partnerships

Priority 10: strengthen links between SIOG and the geriatric oncology workforce, international specialised agencies, global and regional professional organisations, policy makers, and patient advocacy groups

Many health-care systems are inadequately prepared to care for an ageing population because of insufficient training, personnel, and resources. Partnerships with specialised agencies, global and regional professional

For tools for geriatric assessments see <http://www.siog.org/content/comprehensive-geriatric-assessment-cga-older-patient-cancer>

Panel 2: Summary of the updated SIOG Top Priorities for the global advancement of care for older adults with cancer

Education

- Priority 1: integrate geriatric oncology into medical, nursing, and allied health professionals schools and residency training programmes, and promote involvement of trainees in research
- Priority 2: provide educational material and organise formal educational activities focused on geriatric oncology for practising health-care professionals
- Priority 3: educate the general public about the relevance of providing age-appropriate care for older adults with cancer

Clinical practice

- Priority 4: develop and implement models to provide optimal care for older adults with cancer
- Priority 5: develop guidelines for the optimal treatment of older adults with cancer
- Priority 6: establish centres of excellence in geriatric oncology for delivering clinical care, conducting clinical and translational research, and providing educational opportunities

Research

- Priority 7: improve the relevance of clinical trials to older adults with cancer
- Priority 8: evaluate the benefits of geriatric assessment-allocated treatments and geriatric comanagement in improving treatment outcomes for older adults with cancer
- Priority 9: use personalised medicine technologies to enhance cancer understanding and management of older adults

Collaborations and partnerships

- Priority 10: develop and strengthen links between SIOG and the geriatric oncology workforce, international specialised agencies, global and regional professional organisations, policy makers, and patient advocacy groups
- Priority 11: promote the inclusion of specific provisions for delivering high-quality, evidence-based care for older adults in national cancer control plans
- Priority 12: create global funding mechanisms aimed at fostering professional development of the geriatric oncology workforce and promoting research on the interface of cancer and ageing

organisations, and patient advocacy groups could help prioritise geriatric oncology and highlight its relevance for the future, not only of cancer care, but also of health care in general. These collaborations should be implemented on a national, regional, and global scale with equal participation from geriatric oncology stakeholders in HICs and LMICs, with the aim of achieving UHC and meeting the SDG targets by 2030.

Countries need to find innovative financing and cross-sectoral collaborations encompassing global–local, public–private and industry–academia partnerships; this mechanism will increase investments for practical and cost-efficient solutions for this health-care challenge. Patient advocacy groups can help make an economic case to governments and the private sector for shifting from a cost to an investment perspective.

Global and regional public health agencies, including WHO and its regional offices, should include integration of the provision of cancer care for older adults into initiatives aimed at the creation of AFHS. Additionally,

regional and national agencies in charge of evaluating medicinal products and devices, such as the European Medicines Agency and the US Food and Drug Administration, should strive for the inclusion of relevant and representative quotas of older adults registered in clinical trials and for the development of research for the approval of novel medicines for older adults with cancer, as mentioned in priority 7.

For education, official collaborations (eg, through Memoranda of Understanding, contracts, calls for scholarships or fellowship) should be increased and strengthened with universities (see priority 2). SIOG has established templates for such memoranda. Collaborations with organisations such as the World Federation for Medical Education and the International Council of Nurses would be helpful to integrate courses or modules on geriatric oncology into the general physician and nursing curriculums.

The involvement of older patients and their caregivers through advocates and patient organisations should be expanded at all levels of this global initiative (eg, education, research, policy) supported by appropriate reimbursements.

Priority 11: promote the inclusion of specific provisions for delivering evidence-based care for older adults in national cancer control plans

Caring for older adults with cancer is a universal need that represents an epidemiological challenge, which requires political commitment on a global scale. Meeting this challenge should be a priority for national health-care systems worldwide and should be included in national cancer care plans. Countries should create policies that aim to provide UHC for older adults with cancer and integrate oncology and geriatric training in health workforce training as stated in priority 1. These policies should enable the application of geriatric assessment and management, and mobilise all stakeholders, including health insurance and public and private agencies to broaden financial coverage and address education needs.

For HICs, these policies could include supporting integrated national health-care systems, in which teams of geriatricians, oncologists, and other health-care professionals with geriatric training and expertise provide care for older adults with cancer. The reimbursement of geriatric assessments and interventions for older adults with cancer should also be ensured.

For LMICs, these policies could include the development or creation of cancer registries to improve understanding of the epidemiology of cancer in older adults and to establish core national centres of expertise. There is also a need to create social protection schemes to reduce out-of-pocket spending for older adults with cancer. National governments should ensure access to essential cancer medicines, including those required for palliative and supportive care, relying on the WHO Model List of Essential Medicines List.

Priority 12: create global funding mechanisms for professional development and promote research on the interface of cancer and ageing

Global, regional, and national public funding organisations should prioritise the funding of multidisciplinary basic, clinical, and translational research aimed at improving the care of older adults with cancer. However, the capacity of public funding to obtain substantial matching support from the private sector is limited by the absence of a market for such private sector investment in both LMICs and HICs. Health-care systems should work towards creating new partnership models with the private investment sector. The pharmaceutical industry should support research initiatives testing novel drugs, devices, and equipment systems for older adults with cancer. If this development does not occur spontaneously it should be formally requested and incentivised by governments and reimbursement organisations.

Funding and other incentives should be provided by governments to increase the number of health-care workers who enrol in training programmes in geriatrics, oncology, and geriatric oncology. In LMICs, economic incentives for the retention of geriatric oncology specialists should be provided to avoid loss of skilled workers and increase the availability of cancer care providers with geriatric training and expertise. Development of research collaborations with HICs is desirable not only to develop local infrastructure but also to achieve reverse innovation, through which research and models of care developed in LMICs can be translated to health-care settings in HIC. These collaborations should be equitable, avoiding one-sided research. Support funding should also be provided for young researchers and clinicians to obtain training and experience in centres of excellence located in HICs and LMICs.

Conclusion

In this Policy Review, we have provided a broad expert consensus on 12 priorities to advance the care of older adults with cancer on a global scale (panel 2). We strive to harmonise these priorities with other global agendas, notably UHC and SDG3. We welcome the UN declaration on UHC at the UN General Assembly (Sept 23, 2019) and pay particular attention to how the priorities might be implemented in both HICs and LMICs. The ageing of the global population is one of the key challenges of 21st century medicine and improvement in cancer care will only be achieved by close collaboration between medical societies and institutions, governmental agencies, private industry, media, and global health organisations, including patient advocacy groups. The commitment of UN members to achieving UHC is an important step in offering equitable cancer care to older adults, who represent a large and growing proportion of those with cancer.

SIOG has chosen ambitious and visionary objectives to establish multidimensional, interdisciplinary

processes to optimise the health and wellbeing of older patients with or without comorbidities. The SIOG Top Priorities Initiative fits into the broad and long-term achievements of SIOG and its partners and worldwide efforts that have been progressing over the past decade. We intend to ensure that the ongoing works of SIOG and its partners meet international goals and have an effect beyond the UN 2030 Agenda. These goals can be achieved by building large and sustainable international networks for ultimately attaining worldwide health coverage for all.

Contributors

All authors contributed equally.

Declaration of interests

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