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#### **Perspectives**



### Art of Medicine

## Vision 2020: looking back and thinking forward on The Lancet Oncology Commissions

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For the Commission on affordable cancer care in high-income countries see Commission Lancet Oncol 2011; 12: 933-80

For the Commission on cancer control in Latin America and the Caribbean see Commission Lancet Oncol 2013; 14: 391-436 For the Commission on cancer control in China, India, and Russia see Commission Lancet Oncol 2015; 16: 1405-38 For the Commission on the role of primary care in cancer control see Commission

For the Commission on cancer surgery see Commission Lancet Oncol 2015; 16: 1193-224

Lancet Oncol 2015; 16: 1231-72

For the Commission on global access to radiotherapy see Commission Lancet Oncol 2015: **16**: 1153-86

For more on the Global Task Force for Cancer Care and Control see Knaul FM. Gralow IR. Atun R, Bhadelia A. Closing the cancer divide: an equity imperative. Cambridge, MA, USA: Harvard University Press, 2012 The Lancet Oncology was launched 20 years ago with a mission to bridge the divide between science and clinical practice, and to address the enormous global burden of cancer. Since 2011, The Lancet Oncology Commissions (figure) have been at the core of fulfilling that mandate, representing an important global public good. Together with many relevant Commissions published in The Lancet, the Commissions have made invaluable contributions to understanding and meeting the global cancer challenge, and highlighting the importance of cancer within the health system and universal health coverage. In addition, the Commissions have been instrumental in creating the opportunity for informed dialogue by enabling cancer professionals to reach and engage with advocates. By bringing together a diverse group of actors, including oncologists, non-governmental organisations, and UN agencies, and other stakeholders, the Commissions provided a neutral ground for exchange and aligning of ideas to inform and recommend solutions to major cancer problems.

A description of each Commission would not do them individual or collective justice; rather, one can only congratulate the editors and the hundreds of diligent and dedicated researchers who contributed to the wealth of information that make up each report, which is in itself a new body of knowledge.

The first Commission, which addressed the delivery of affordable cancer care in high-income countries, set the tone for those that followed by engaging a wide spectrum of experts from around the world. The next three Commissions examined cancer control in Latin America and the Caribbean, China, India, and Russia, and the potential role of primary care in cancer control, addressing the issues of diversity of health systems and culture. In 2015, the Lancet Cancer Campaign and Commissions dealing with global access to cancer surgery and radiotherapy were launched.

The radiotherapy Commission was modelled on the Global Task Force for Cancer Care and Control and engaged experts in global health, economics, and UN agencies, in addition to oncologists, physicists, and radiation therapists. It embraced new ways to look at the problem ensuring global access to radiotherapy—by describing not only the cost of scaling up radiotherapy capacity but also the economic benefits of such investment. The Commission report inspired new focus on radiotherapy as an essential component of effective cancer control. The need for access to, and the benefits of, radiotherapy are no longer questioned. The Commission highlighted the need to initiate action given the long timelines required and the need for leadership to achieve its goals. The solution was to urgently engage young leaders who would continue research, advocacy, and action for years to come, such as the GlobalRT initiative, which advocates for radiotherapy to become a global health priority. These leaders have acted on the many innovations in technology, education, and financing highlighted by the Commission.

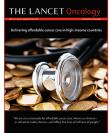
Similarly, the issue of palliative care was recognised as a key, yet neglected, element of the continuum of cancer care and control. The cancer integration aspect of palliative care by The Lancet Oncology Commission was complemented by a Lancet Commission that showed why palliative care and pain relief are imperative to universal health coverage and how to achieve universal access as part of health system strengthening. Finally, in 2020, The Lancet Oncology Commission on childhood cancer, another neglected issue, proposed concrete actions and quantified the return on investment.

The Lancet and The Lancet Oncology Cancer Campaign and Commissions have had a large impact in the global health arena. These journals have provided the evidence required to organise the 68th World Health Assembly resolution on access to surgery and the 70th World Health Assembly Cancer Resolution. Cancer treatment and palliation are included in the UN Joint Global Programme on Cervical Cancer Prevention and Control, and the childhood cancer Commission is informing the WHO Global Initiative for Childhood Cancer announced in 2018, in partnership with St Jude Children's Research Hospital (Memphis, TN, USA).

A litmus test of the quality of a research paper is its relevance years after its publication. The suite of The Lancet Oncology Commissions passed this test as they have not become obsolete. Indeed, much of the data, analysis, and recommendations continue to be applicable and pertinent. Further, individually and as a set, they constitute an excellent tool for teaching and for global cancer control advocacy. Their success might well be because of the flexible format of the The Lancet Oncology Commissions—they do not have a common template which allows researchers to explore new avenues of inquiry and expand horizons.

Although The Lancet Oncology and the cancer community should be very happy with the Commissions' high-quality analysis and evidence, they might not be happy with their impact. Far too much remains to be done in the face of a growing global cancer challenge. There is ample evidence

2011



# Delivering affordable cancer care in high-income countries

In 2011, The Lancet Oncology launched its first Commission. With the burden of cancer increasing and its impact on economic expenditure for developed countries, the Commission called for a shift in cancer policy, with changes in the macroeconomic basis of cancer costs, greater education of policy makers, and informed and transparent regulatory systems.

2014



#### Challenges to effective cancer control in China, India, and Russia

China, India, and Russia have rapidly rising cancer incidence and high cancer mortality. large populations and territories, growing economies, ageing populations, increasingly westernised lifestyles, relatively disenfranchised subpopulations, and serious environmental problems. This Commission addressed the specific challenges to providing cancer care in these countries and identified the crucial steps needed to effect change.

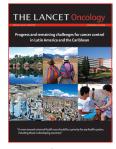
2015



#### Global cancer surgery: delivering safe, affordable, and timely cancer surgery

Surgery is essential for global cancer care. Yet, less than 25% of patients with cancer worldwide actually get safe, affordable, or timely surgery. The Lancet Oncology Commission on Global Cancer Surgery suggested that national cancer control plans must include the strengthening of surgical systems through investment in public sector infrastructure, education, and training to strengthen the role of, and access to, cancer surgery worldwide.

2015



#### Progress and remaining challenges for cancer control in Latin America and the Caribbean

Two years after the publication of the first Commission on cancer control in Latin America and the Caribbean, a new Commission explored the effects of the first. This Commission highlighted structural reforms in health-care systems, new programmes for disenfranchised populations, expansion of cancer registries and cancer plans, and implementation of policies to improve primary cancer prevention.

2018



#### Integration of oncology and palliative care

In The Lancet Oncology Commission, the authors discussed how to integrate oncology and palliative care using standardised care pathways, referral guidelines, and collaboration to achieve the best outcomes for patient-centred care. Effective integration must be anchored in management and policy at all levels of health care, and an integrated approach must be reflected in both international and national cancer control plans to help develop new models of care, educational and research programmes, adequate resource allocation, and sufficient investment.

2021 and beyond



Global Cancer Surgery 2 Cancer Control in Sub-Saharan Africa

2013



#### Planning cancer control in Latin America and the Caribbean

THE LANCET

In Latin America and the Caribbean, cancer control plans vary widely between countries, were largely reactionary to treating advanced cancers, and strongly favoured a wealthy and educated minority. In 2013, the Commission recommended implementation of primary prevention measures and optimisation of early cancer detection and treatment of primary cancers to avoid late diagnosis.



2015

### Expanding global access to radiotherapy

Despite its crucial role in cancer treatment, radiotherapy is frequently the last resource to be considered in planning and building treatment capacity for cancer, and worldwide access to radiotherapy is low. In 2015, The Lancet Oncology Commission called for an increase in human resources specialised in radiotherapy, sustainable financing to expand access to radiotherapy, and alignment of radiotherapy access with universal health coverage.



2015

### The expanding role of primary care for cancer control

The focus of cancer control is shifting onto prevention, early diagnosis, and patient experience during and after treatment, as the clinical and economic benefits of avoiding late stage cancers become clear. In this context, primary care can have an important role in cancer control, from primary prevention to end-of-life care—these strengths were explored in this Commission.



#### Future cancer research priorities in the USA

Enactment of the Cancer Moonshot within the 21st Century Cures Act in the USA in 2016 provided nearly US\$2 billion of funding for cancer research and precision medicine. The Blue Ribbon Panel set out a roadmap of recommendations designed to exploit new advances in cancer diagnosis, prevention, and treatment. The Lancet Oncology Commission aimed to explore those recommendations and include additional priority areas that would accelerate efforts to benefit patients with cancer.



### Sustainable care for children with cancer

It is estimated that there will be 13.7 million new cases of childhood cancer globally between 2020 and 2050. More investment is needed for improved access to diagnosis, health-care services, and treatment to avoid the death of millions of children. particularly in low-income and middle-income countries. This Commission, presents a comprehensive analysis to develop an investment case for funding sustainable control of childhood cancer.

Figure: The Lancet Oncology Commissions since 2011

For more on the **GlobalRT initiative** see Rodin D, Yap ML, Hanna TP. GlobalRT: building a new radiotherapy community. *Lancet Oncol* 2014; **15**: 926

For the Commission on oncology and palliative care see Commission Lancet Oncol 2018; 19: e588-653

For more on *The Lancet*Commission see Commission
Lancet 2018; **391**: 1391–454
For the Commission on care for

children with cancer see
Commission Lancet Oncol 2020;
21: e185–224

For the TEDx talk on Burying the complexity see https:// www.youtube.com/watch?v=UfcsD3HdTM

For more on machine-learning technologies in written communication see J Clin Epidemiol 2017; 91: 31–37,

and 2018 IEEE International Conference on Information Reuse and Integration, Salt Lake City, UT, 2018; 478-84

For more on the **thinking futures approach** see https://www.oecd.org/site/schooling fortomorrowknowledgebase/futuresthinking/scenarios/futuresthinkingmethodologies andoptionsforeducation.htm

For more on **systems thinking** see Savigny DD, Adam T, Alliance for Health Policy and Systems Research, WHO. Systems thinking for health system strengthening. Geneva, Switzerland: World Health Organization, 2009 that the progress in cancer control is too slow and we are failing to flatten the curve of cancer incidence and mortality.

Cancer control desperately needs a change in direction, from perseverating on its complexity to embracing innovations that "bury the complexity". *The Lancet Oncology* can enable this change through a vision inspired by what the future might hold, even if the foreseeable present does not.

We now know that presenting evidence is not enough. Evidence must reach the audiences who can use it and transform it into action. Oncologists and researchers are only one group and The Lancet Oncology Commissions can, and must, go further. Outside these groups, and sometimes even within them, complex messages fall on deaf ears. The research might be elegant, but inaccessible to many. Who are the audiences of the future? We suggest that information must be more accessible to diverse audiences through innovation in communication (eg, through condensed messaging similar to that used by the Blinkist book-summarising service). There are opportunities to enable and use new machine-learning technologies to facilitate the dissection and integration of information from across the Commissions. Should the messaging be different for students and researchers than for leaders and advocates who might not be prepared to digest complex reports? The experts might want to read about the new findings in the Commissions, whereas non-experts might only want to read a brief summary of these findings. It should now be possible to tailor the text to specific audiences.

There is also a need to collate the information published over time to help readers digest what thousands of papers inform us of every year. Is it time for a meta-Commission on cancer? Should that be a regular activity?

Although improved messaging and knowledge transfer are important, there is also desperate need for innovation. Although health care is notoriously slow to adopt new technologies, the COVID-19 pandemic drove progress in digitalisation faster that anyone imagined possible. The digitalisation of health care introduced virtual care, virtual second opinions, and immediate access to expertise, thereby removing several barriers to care delivery. Telepathology, teleradiology, and remote quality assurance are also all examples of how digitalisation of health care can be used to scale up access to cancer care, and show the importance of harnessing this acceleration for cancer control.

As The Lancet Oncology enters a new vicennial period, it is imperative that the Commissions set new targets on impact. The rapid pace of innovation in digital technology and the growth in digital competency activated by the COVID-19 pandemic creates the opportunity for the Commissions to adopt a more futuristic approach. The so-called thinking futures approach promoted by the Organisation for Economic Co-operation and Development is compelling. Can commissioners be asked to imagine what the world will look like in 20 years, do more than leapfrog, and write as though the world will be better than it is today?

Cancer is complicated. But if we understand cancer, we will understand the entire health system. We can make cancer the engine for understanding and improving health systems to achieve universal health coverage and sustainable development goal 3. In the future, cancer control could be the key to unlock a more efficient, effective, and well integrated health system for all, spanning from primary to specialty care. Achieving this means sharing our systemic innovations with communities we do not often interact with (eg, health system designers, economists, and political scientists). Further, the history of cancer innovations in medicines and interventions shows us how prices can come down and access can increase, as seen with the human papillomavirus vaccine. The future of research in global cancer should be based on the economics of hope. A vision guided by a world where we are prepared for crisis and pandemics, but also account for a better tomorrow.

We would argue that this future is more feasible than ever as the COVID-19 pandemic has been a great wake-up call for society at large. It provides the best evidence for the economic value of health, with governments pouring resources into economic stability that could have been managed more effectively and at a reduced cost by use of a systems thinking paradigm. It is time to take full advantage of this realisation and integrate the future cancer system that so many of the Commissions have called for. Thinking forward, we must accept that there can and will be disruptive changes, both within and outside health care, and we have the opportunity to weave a better cancer system into what emerges.

\*Mary K Gospodarowicz, David A Jaffray, Felicia M Knaul