

Global Task Force on Radiotherapy for Cancer Control

See *The Lancet Oncology Commission* page 1153

Cancer is an immense, fast-growing challenge to health and health systems worldwide. Previously thought to be restricted to high-income populations, it is now also recognised as an emerging and critical issue for low-income and middle-income countries. Although the challenge of cancer control in low-income and middle-income countries has been highlighted before,¹ a comprehensive, integrated and global health system response was first forged with the work of the Global Task Force on Expanded Access to Cancer Care and Control, which began in 2009.² This effort inspired the creation of the Global Task Force on Radiotherapy for Cancer Control (GTFRCC),³ chaired by David A Jaffray, which consisted of more than 100 members, including radiotherapy professionals, oncology experts, industry representatives, and economists. The Union for International Cancer Control (UICC), a global initiative dating to the 1930s that works to promote greater equity in cancer control, mandated the GTFRCC,⁴ which was launched under the President's portfolio with essential support from key leaders in the European Society for Radiotherapy and Oncology (ESTRO), the International Atomic Energy Agency (IAEA), and the radiotherapy industry.

Cancer control necessitates comprehensive and coordinated actions that span prevention, access to accurate and timely diagnosis, treatment, and palliation. Radiotherapy is a key curative and palliative treatment modality for cancer. However, the dearth of radiotherapy treatment capacity globally has led to gross inequities in access. The GTFRCC took on the task of quantifying the investment needed to close the global radiotherapy access gap.

Through the inspiring leadership of the UICC board members—especially Felicia M Knaul, board member and leader of the GTFRCC—the GTFRCC recruited the foremost global experts in the field to form the Secretariat to coordinate and direct the task force's efforts. It was recognised that developing the economic case for radiotherapy would be at the core of the GTFRCC's efforts, and Rifat Atun, who has extensive experience in global health and innovative financing for health care,^{5–8} joined the Secretariat. The GTFRCC was fortunate to have the President of Uruguay, Tabaré Vázquez, who is a radiation oncologist, as its Honorary Chair.

The GTFRCC assumed as its mandate the documentation of the challenge and quantification of the investment needed to achieve global equity in access to radiotherapy by 2035. The task force was determined to show not only the health benefit of this transformative investment in cancer control, but also the economic benefit of radiotherapy using an investment framework. The GTFRCC aims to connect the details of the need for radiotherapy to the global health agenda and machinery to advance comprehensive cancer services worldwide. We engaged *The Lancet Oncology* early in our deliberations⁹ and eventually became part of the *Lancet* Cancer Campaign as The Lancet Oncology Commission on Global Radiotherapy.¹⁰

Over the past 2 years, the GTFRCC investigated the role and global need for radiotherapy through the activities of two working groups. The first, under the leadership of Michael B Barton and with input from Freddie Bray of the International Agency for Research on Cancer, estimated the 20-year future burden of cancer requiring radiotherapy and determined the projected benefit in terms of lives saved of making radiotherapy available globally according to evidence-based practice guidelines.^{11,12} The second working group was led by Jacob Van Dyk and reviewed the requirements in terms of facilities, equipment, and human resources to generate sufficient capacity to deliver the scale of treatment necessary to deal with the projected burden. It also calculated the capital and operating costs of creating and delivering this capacity. In parallel, Rifat Atun led the development of the investment model to evaluate the economic case for investment in radiotherapy.

The deliberations and progress of the working groups were presented and discussed throughout 2014 at GTFRCC-hosted sessions at the annual ESTRO, American Society of Clinical Oncology, American Society for Radiation Oncology, and UICC World Cancer Congress. Additionally, the GTFRCC Secretariat held a workshop in Toronto in February, 2015, to reach a consensus on the assumptions required to calculate the economic benefit. The full membership of GTFRCC was engaged in the work through participation in meetings, surveys, and a series of webinars held throughout spring of 2015 to canvass opinions and ideas for the final report before publication.

For the full list of members see www.gtfrc.org

For more on the *Lancet/Lancet Oncology Cancer Campaign*, please see <http://www.thelancet.com/campaigns/cancer>

The GTRCC concentrated specifically on investment in radiotherapy as a neglected and necessary facet of global cancer control.¹³ Our work has attracted considerable interest and great expectations in the global cancer and radiotherapy communities. At the same time, it is clearly evident that to realise the full benefit from radiotherapy a parallel investment has to be made in diagnostic services (pathology and imaging), surgery, chemotherapy, and broader health-care strengthening platforms. The results of the task force complement and contribute to the ongoing efforts of the IAEA, the global cancer community, and WHO to promote greater equity in access to cancer care now and the future.

Closing the gap in equitable access to radiotherapy is a complex undertaking. The effort to provide radiotherapy around the world will continue for decades. In recognition of the magnitude and the need for sustained advocacy and champions, the GTRCC enlisted several young leaders who enthusiastically engaged in the work and created a new effort, GlobalRT, under the leadership of Danielle L Rodin.¹⁴ This social movement aims to connect young people interested in busting the myths and working together to ensure that evidence-based radiotherapy practice is included in the toolbox of cancer therapies available worldwide. Our findings, together with recommendations for concrete steps to close the divide in access to radiotherapy are presented in full in this issue of *The Lancet Oncology*.

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For more on GlobalRT see
<http://www.globalrt.org>

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The verdict is in: the time for effective solutions to the global cancer burden is now

See *The Lancet Oncology Commission* page 1153

That the growing global burden of non-communicable diseases is a human catastrophe requiring action was brought to the world's attention over the past decade by WHO,¹ culminating in a UN declaration in 2011.² Non-communicable diseases—respiratory diseases, obesity, cardiovascular disease, and cancer—have common causes, including nutrition, personal habits, environment, and ageing.³ The importance of non-communicable diseases does not diminish that of communicable diseases, and there are clear links between human papillomavirus and cervical cancer, and the hepatitis viruses and liver cancer.

Effective cancer control necessitates a multi-dimensional, multisectoral, multidisciplinary, and international approach. In debates, the issue of affordability is invariably raised, particularly for radiotherapy, in view of the cost of establishing and maintaining facilities. In this issue of *The Lancet Oncology*, the comprehensive need assessment and economic analysis by Rifat Atun and colleagues⁴ rejects the argument that radiotherapy is unaffordable, and shows that investment in radiation oncology both saves lives and is associated with positive economic returns.

Radiotherapy is a key component of curative and palliative treatment. Substantial benefit is achievable from combined treatment with radiation and standard drugs to cure some locally advanced cancers and from short-course radiation (hypofractionation) as part of palliative care. Investment in partnerships is needed to train, educate, mentor, and sustain programmes in settings with limited personnel, resources, and infrastructure. The Global Taskforce on Radiotherapy for Cancer Control set up by the Union for International Cancer Control (UICC) is a remarkable project. Its analyses and robust collection of

contributors provide clear evidence that there could be an effective way forward.⁴

If addressing global cancer care results in both health and economic benefits,⁴ why are effective radiotherapy and cancer care programmes so difficult to establish in low-income and middle-income countries? There are several frequently articulated reasons for not addressing this problem, all of which are certainly resolvable.

Some suggest a focus only on prevention. Prevention is crucial, but what happens to patients for whom it is not effective? Furthermore, prevention has not eliminated cancer in resource-rich countries. Others suggest that cancer care is too expensive, or the problems too complicated, but the results of the Commission show that non-treatment is more expensive⁴—and there are examples of high-quality cancer care in low-income and middle-income countries. Successful, affordable treatment regimens exist, and technology can link global experts to centres in low-income and middle-income countries, enabling access to new concepts and mentoring.

Suboptimum health-care and physical infrastructures are other common reasons cited for not addressing the issue. However, systems are in need of repair for everything from maternal and child health, to communicable and non-communicable diseases.^{5,6} There is the opportunity for innovative technology to cope with challenging infrastructure. That low-income and middle-income countries do not have the expertise is another common concern, but the world has the expertise to train, mentor, and sustain people in these areas. Effective mentoring models are needed, such as the International Cancer Expert Corps.⁷

Policy makers in resource-rich countries appropriately suggest that they cannot be responsible for provision

For more on the **Global Taskforce on Radiotherapy for Cancer Control** see <http://gtfrc.org/>

For more on the **Union for International Cancer Control** see <http://www.uicc.org>

For more on the **International Cancer Expert Corps** see <http://www.iceccancer.org>

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