Providing a continuum of cancer control and care

The Facts
Cancer is a complex disease with the appropriate treatment of most cancers requiring a multi-faceted approach that spans the entire cancer continuum, from prevention to long-term care (Figure 1).

“With few exceptions, early stage cancers are less lethal and more treatable than late stage cancers”

Global Task Force on Expanded Access to Cancer Care and Control in Developing Countries

Currently, cancer patients in many countries do not have access to some or all of these essential cancer services. Patients whose diseases are curable in the developed world unnecessarily suffer and die due to a lack of resources that enable early diagnosis and appropriate treatment. National Cancer Control Plans must be developed to meet the needs in all of these areas, and to ensure that cancer is diagnosed early when the chance of cure is greatest.

A Global Solution
The core elements of a cancer control and care continuum must be decided within each country based on existing health resources and infrastructure, the burden of cancer, country-specific cancer risks, political and social conditions, and cultural beliefs and practices. National cancer control plans should consider the full spectrum of multidisciplinary cancer services and infrastructure across the continuum of cancer control and care, including capability and capacity to deliver:

- Education and public awareness programmes on cancer prevention, early detection and treatment
- Primary prevention programmes to address modifiable risk factors
- National immunisation programmes for HPV and HBV
- Early detection programmes
- Diagnostic technologies for accurate diagnosis and treatment
- Pathology services to process and interpret biological specimens
- Safe and effective cancer surgery
- Safe administration of effective, quality and affordable medicines
- Radiation therapy for treatment and symptom control
- Palliative care and relief of symptoms and suffering
- Survivorship support for cancer patients and their families
- Quality research and development
- Adequate and sustainable financing for primary and hospital care
- Skilled workforce
Supporting Evidence
A robust evidence base exists from diverse countries to support the core elements of the cancer control and care continuum for different resource settings:

- The ability to conduct high quality research is crucial for the development and monitoring of successful National Cancer Control Plans as well as potential differences in the presentation of disease across populations and of response to specific treatments that may differ from those of high-income populations.
- Lack of information and education about cancer is a major barrier to effective cancer control and care in developing countries, especially for the detection of cancers at earlier and more treatable stages. Individuals, policy makers and health care professionals need to understand that many cancers can be prevented through appropriate behavioural change, that cancer can often be cured, and that effective treatments are available.
- Many cancers are preventable through infection control and lifestyle modifications. Prevention, through national immunisation programmes for HPV and HBV, promoting lifestyle change, reducing tobacco use and reducing exposure to environmental risk are of the highest priority.
- The most effective and efficient treatment programmes are those that are linked to early detection, with the infrastructure in place for accurate diagnosis that in turn underpins an appropriate and successful treatment plan. Without early diagnosis, the ability to successfully cure patients of their disease is diminished.
- Team-based, multidisciplinary treatment programmes that include access to quality, affordable and effective cancer medicines, surgery and radiotherapy are critical to the delivery of high-quality cancer care.
- In many cases the largest and most unacceptable gap in cancer care is the lack of adequate palliative care for much of the world’s population. A small number of medications, none of which are limited by patent, can control pain for almost 90% of all people with cancer pain\(^1\) including children\(^1\).
- For patients cured of their cancer, or living with their cancer, the provision of cancer survivorship care is critical for patients to return to a good quality of life. Mitigation of the effects of the cancer and treatment on the patient, establishment of a healthy lifestyle, and screening for new cancers becomes a key focus.

Meeting the Challenge
Successful cancer control and care programmes in many low resource settings around the world provide effective cancer services across the continuum of care dispelling the myth that this approach is only feasible in high resource settings. Locally appropriate solutions that provide sustainable and equitable services and encompass the core elements are possible even with scarce resources and policy makers must understand that without each of the critical components of a multidisciplinary approach, high quality cancer care is not possible.

Burkitt’s Lymphoma: Success of Chemotherapy in improving survival in the poorest nations
One of the most spectacular examples of how chemotherapy can be successfully delivered in low resource settings is for the treatment of Burkitt’s lymphoma—a rapidly growing tumour that results in disfigurement. Although rare in high income countries, it is the most common childhood cancer in the malaria belt of Africa, causing 3,000 deaths every year. Chemotherapy using inexpensive, readily available drugs is highly effective and can be delivered safely in low-resource settings. In India and Egypt, adoption of standard protocols has transformed the outlook for patients, increasing survival rates from 45% to 70-80%.

Replicating this model in other settings
Founded in 1998, the International Network for Cancer Treatment and Research (INCTR) aims to promote evidence-based practice through long-term research projects investigating the most effective approaches to cancer care in specific settings, and supporting the growth of centres of excellence and training networks. Currently, the African Burkitt Lymphoma Strategy Group comprised of investigators from Cameroon, Kenya, Nigeria, Tanzania and Uganda has implemented a study protocol entitled, “The Treatment and Characterization of Burkitt’s Lymphoma in Africa”.

- Over 400 patients have been enrolled on the protocol with preliminary data showing it is possible to cure a significant fraction of patients, even those who relapse or partially respond to initial treatment.
- The preliminary reports indicate a significant improvement in managing patients with Burkitt’s Lymphoma.
- The team approach to patient care is now well established in these centres.
- Supportive care and patient follow-up has improved.
- Accurate and complete data for all study patients are being collected, and data monitoring is performed.

References