Together against Cancer
The Need to Develop Cancer Control Capacity

Cancer accounted for an estimated 7.6 million deaths worldwide in 2008 and the number of new cancer cases continues to rise. The International Agency for Research on Cancer (IARC) estimates that by 2030, each year over 21 million people will be diagnosed with cancer and 13 million will die from the disease (GLOBOCAN 2008). The majority of these new cases are expected to occur in people living in low and middle income (LMI) countries, where over 70% of cancer cases are diagnosed too late for cure. The growing burden of cancer is a major cause for concern as cancer care services are often unable to meet the increasing demand.

Developing global awareness of the growing cancer crisis and encouraging LMI countries to take a comprehensive approach to cancer control is critical for improving cancer survival rates. The World Health Organization (WHO) encourages countries to develop a comprehensive National Cancer Control Programme (NCCP). Developing and implementing an NCCP can enhance a country’s potential to stage interventions across the cancer control continuum and maximize the impact of cancer control actions.

Albania is implementing a project funded through IAEA/PACT on breast cancer awareness and training of health professionals, and worked with the IAEA, WHO and IARC to define their national strategy and action plan for breast and cervical cancer control.
PACT Model Demonstration Sites

PMDS objectives

To place cancer on the global health agenda and support LMI countries in attracting new resources for cancer control, IAEA/PACT and WHO developed “PACT Model Demonstration Sites (PMDS)”. PMDS are based in IAEA and WHO Member States and are comprised of multidisciplinary cancer capacity building projects whose aim is to demonstrate the advantages of systemic, cross-sector collaboration. They are also designed to illustrate the synergies that can be created by bringing together national and international stakeholders and joining efforts for the development of comprehensive cancer control capacity. The impact on the cancer burden can be maximized through partnerships and combined technical expertise aligned with each organization’s mandate.

Through the PMDS initiative, IAEA/PACT and its partners have worked to support the development of cancer control infrastructure, build human resource capacity and mobilize resources for evidence-based cancer control interventions. PACT endeavours to support the effective implementation of a country’s radiation medicine programme as an integral component of its comprehensive NCCP.

National Cancer Control Programmes

The WHO defines an NCCP as “a public health programme designed to reduce cancer incidence and mortality and improve quality of life of cancer patients, through the systematic and equitable implementation of evidence-based strategies for prevention, early detection, diagnosis, treatment, and palliation, making the best use of available resources.”
Bringing PMDS Together

In November 2012, PACT convened, for the first time, a technical workshop with cancer control representatives from all eight PMDS, which included the participation of WHO, IARC and the Union for International Cancer Control (UICC) as well as external experts. This gathering provided a unique opportunity for all participants to assess advances made in each country and permitted PMDS to share experiences and lessons learned in developing comprehensive approaches to address cancer control.

Partnerships

PACT partners, including WHO, IARC and UICC have played an important role in supporting the PMDS project.

In addition to international organizations and agencies, the IAEA works with national cancer institutions, and non-governmental organizations.

Promoting a collaborative effort to address cancer control in PMDS countries will enable them to address the cancer crisis more effectively. Cooperation with a wide range of partners with various areas of expertise will ensure the best outcomes in planning and implementing cancer control initiatives.

To support Vietnam’s efforts to expand radiotherapy treatment capacity, the Government of India donated a Cobalt-60 radiotherapy unit (Bhabhatron-II) through PACT to the Can Tho Oncology Hospital.
Ghana has received long term loans from OFID and the Arab Bank for Economic Development in Africa, with support from PACT, for upgrading and strengthening radiotherapy and nuclear medicine services in the country.

Resource mobilisation

The PMDS are supported by PACT in their resource-mobilization efforts for the development of sustainable cancer control activities based on national priorities. As part of the assistance provided to a PMDS in its efforts to plan and implement an effective national cancer control programme, the IAEA and its partners identify potential donors for project funding, assist in the mobilization of resources and provide technical expertise based upon their respective mandates.

PMDS around the world

Since the project’s inception, eight PMDS have been established in the six WHO geographical regions. Initially launched in 2006, PMDS are located in Albania, Ghana, Mongolia, Nicaragua, Sri Lanka, Tanzania, Vietnam and Yemen. It is forseen that each PMDS would be for a pre-determined, time-bound duration.
Children receiving cancer treatment in Nicaragua are referred to the country’s only institution providing radiation therapy services, the National Radiotherapy Centre in Managua. This hospital now has a dedicated waiting area for children to play and feel comfortable while waiting to receive treatment, thanks to funding received through PACT.

Snapshots of success

Since 2006, over US $18 million has been mobilized through PACT for the eight PMDS countries. This funding has been used for human resource development, provision of radiation medicine equipment, expert missions and additional cancer control capacity building activities. PACT and its partners have facilitated training for over 115 professionals from PMDS countries.

Below are some examples of the PACT projects in each of the PMDS.

Albania

In 2009, a Cobalt-60 radiotherapy unit (Equinox) was purchased and cost-shared by Albania, IAEA and MDS Nordion/Best Theratronics for the University Hospital “Mother Teresa” in Tirana, providing improved access to radiotherapy for Albania’s population. A Joint WHO/IAEA/IARC workshop on cervical and breast cancer, in collaboration with the Ministry of Health, was held in June 2010 in Tirana to discuss a national strategy and action plan for breast and cervical cancer control. The OPEC Fund for International Development (OFID) provided funds for a PACT project that has raised awareness of breast cancer in Albania and trained several health care professionals working in breast cancer.

Ghana

Ghana established the National Cancer Control Steering Committee and, supported by IAEA/PACT and WHO Regional Office, developed a bankable project to increase radiation medicine infrastructure within the NCCP that subsequently secured two long-term development loans from OFID and the Arab Bank for Development in Africa. The loan is being used for upgrading and strengthening radiotherapy and nuclear medicine at the Korle Bu Teaching Hospital in Accra and Komfo Anokye Teaching Hospital in Kumasi, as well as for activities on early detection and palliative care.
Mongolia

Mongolia received funding from the Principality of Monaco as well as from the Government of Japan and the Republic of Korea for a PACT project to improve the quality of radiotherapy and palliative care in the country. Additionally, the United Nations Women’s Guild in Vienna has provided funds for a playground for paediatric cancer patients built at the National Cancer Center in Ulaanbaatar.

Nicaragua

MDS Nordion/Best Theratronics donated, through PACT, a Cobalt-60 radiotherapy unit (Equinox) to the National Radiotherapy Centre in Managua to increase its capacity. Nowadays, it constitutes the second working radiotherapy unit in the country. The Government of Spain funded a project in Managua, which will contribute to improve breast and cervical cancer diagnosis in the areas of pathology and mammography. Thanks to funds donated by the United Nations Women’s Guild in Vienna, a dedicated waiting area has been established for children receiving treatment at the National Radiotherapy Centre in Managua.

Sri Lanka

The Government of Korea has provided funds for a PACT project, mainly on training, to improve the quality of radiotherapy in the country. Funds have also been provided by United Women’s Guild in Vienna for the “Provision of a Blood Gas Analyser for the Intensive Care Unit of the Paediatric Unit at the National Cancer Institute Maharagama”.

Tanzania

An OFID-funded project is working to increase palliative care services for cancer patients in Tanzania. To improve cancer therapy capacity, MDS Nordion/Best Theratronics donated, through PACT, a Cobalt-60 radiotherapy unit (Equinox) to the Ocean Road Cancer Institute (ORCI) in Dar es Salaam. Since its installation in 2008, ORCI has been able to treat 2000 additional patients.

Vietnam

To support Vietnam’s efforts to expand radiotherapy treatment capacity, the Government of India donated a Cobalt-60 radiotherapy unit (Bhabhatron-II) through PACT to the Can Tho Oncology Hospital. Prior to this donation, the Can Tho region of over three million people had no radiation therapy service. Additionally, OFID has provided funds for a PACT project that aims to increase capacity in the early detection of breast and cervical cancer.

Yemen

A National Cancer Control Planning Workshop was held in 2013 under the auspices of the IAEA and the WHO Eastern Mediterranean Regional Office in Egypt to define priorities in planning and implementing cancer control activities in the country. A financial contribution by the Korea Nuclear International Cooperation Foundation (KONICOF) was received through PACT for training in the Republic of Korea for Yemeni health professionals.
“The best weapon to deal with the world cancer crisis is to have a national cancer plan developed in each country.”

Franco Cavalli, Oncology Institute of Southern Switzerland and past President of the Union for International Cancer Control.