

# **Programme of Action for Cancer Therapy (PACT)**

**Building a Sustainable  
Cancer Care Capacity in  
Developing Countries to  
Meet the Challenge**

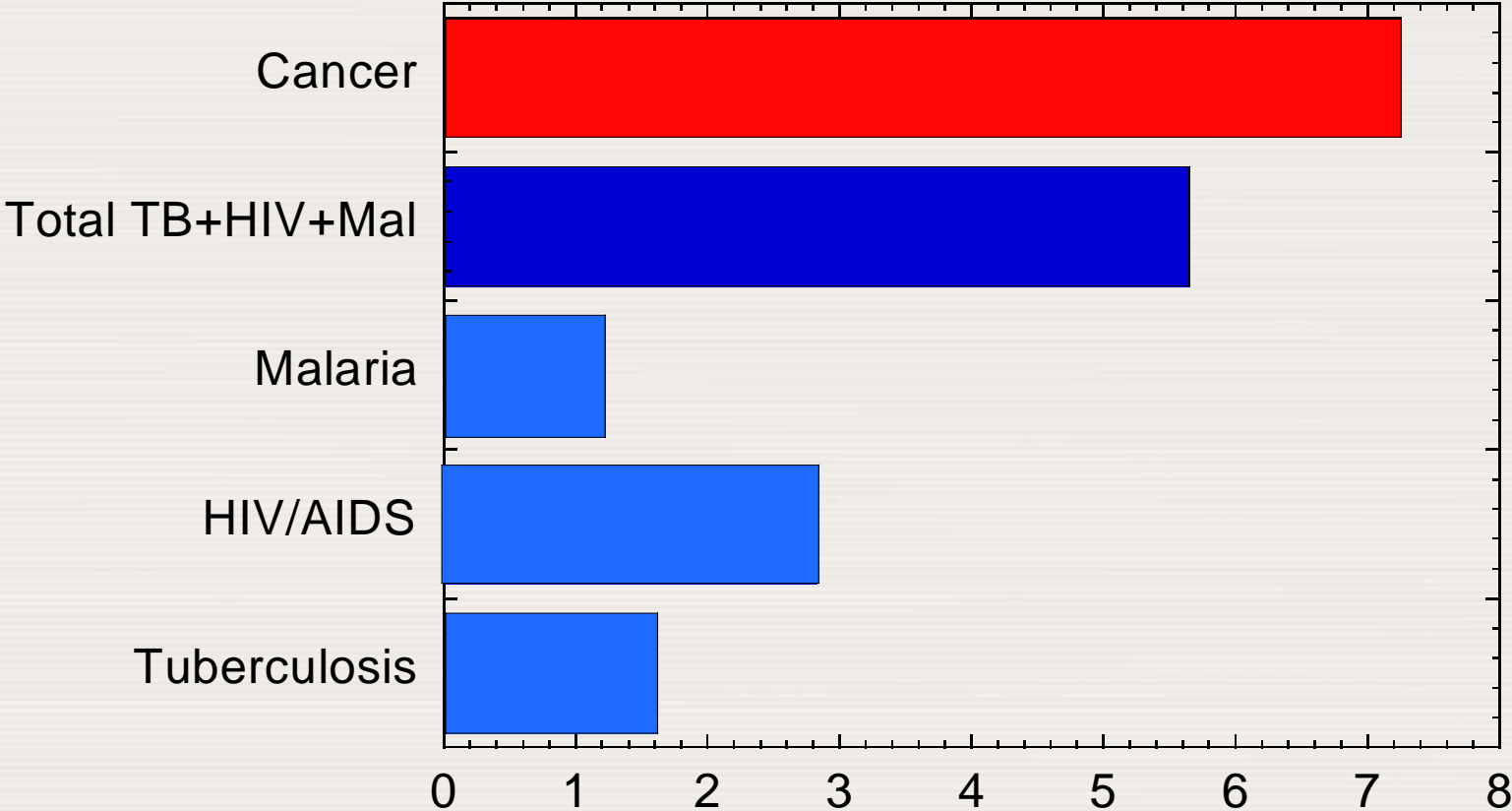
**PACT Programme Office**



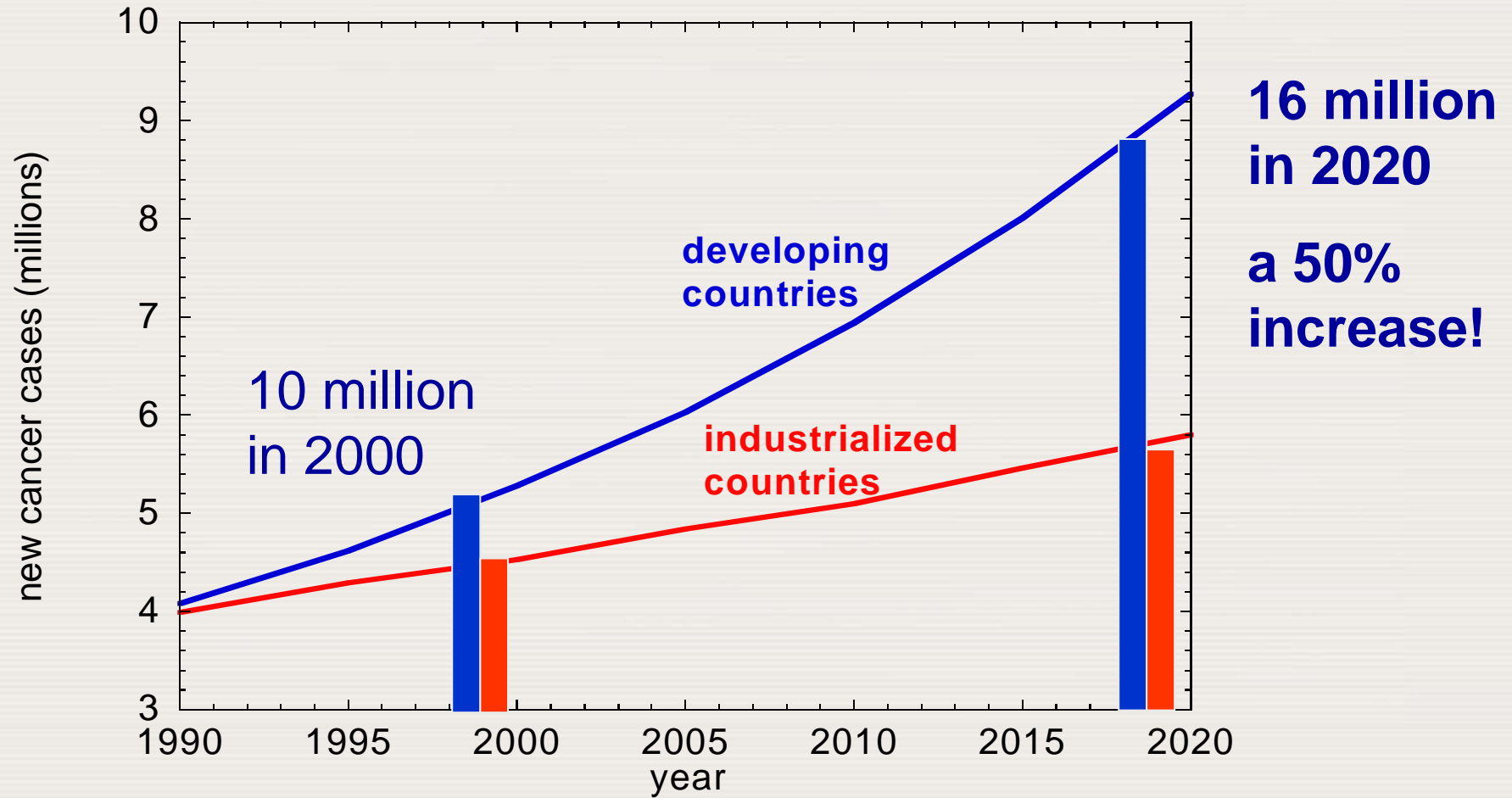
**IAEA**

International Atomic Energy Agency

# Millions of deaths in 2002



# New cases of cancer annually



# Demands Action

- IAEA created the *Programme of Action for Cancer Therapy (PACT)* to respond effectively to the cancer challenge
- PACT is a vision of a more comprehensive, powerful way to help developing nations fight cancer
- Global, integrated and comprehensive action by international organizations, governments, public and private institutions
- Relying on past IAEA experience, current programmes and strengths, to take action to save lives and prevent suffering
- PACT will work at policy level with ministries of health, interagency partners, national education and other institutions responsible for cancer prevention, treatment and control



# Why the International Atomic Energy Agency (IAEA)?

- Strong technical expertise in radiotherapy
- Unrivalled experience
- Full “service” – therapy, safety, security
- The largest existing international health infrastructure and programme in developing nations dedicated to cancer



# Nuclear Applications in Health: An Unique Mandate of the UN System

“The Agency shall seek to accelerate and enlarge the contribution of atomic energy to health and prosperity throughout the world”

*Article II of the Statutes of IAEA*



## Atoms for Health



# The IAEA has already accomplished much...

- Since 1980: \$147 million for over 170 projects in 80 developing countries
- Today: \$12 million/yr for cancer therapy projects
- Tomorrow: Need at least *10 times* this much to meet spiralling demand



# IAEA Expenditure on Cancer Projects 1980-2004



# Can the Agency solve the radiotherapy issue worldwide?

***NOT ALONE*** but ...

The current and projected magnitude of the cancer epidemic in developing nations demands additional resources:

- Target “new money” (foundations, private sector, charitable trusts)
- Reach out to other strategic partners and donors to maximize results



# PACT's Vision: South-South and North-South Partnerships

Expand sustainable national cancer care infrastructure and capacity, and progress towards eventual self-sufficiency in cancer **prevention** and **control** by:

- **Building a Cancer Control Coalition** of interested parties committed to addressing the challenge of cancer in developing countries in all its aspects
- **Mobilizing resources** from charitable trusts, foundations, and others in the public and private sectors to meet the above challenge over an incremental, phased 5 to 10 year strategy



# Deriving Cancer System Synergies

**Building a comprehensive cancer control system offers essential clinical and public health synergies to improve outcomes --**

## **Example 1: Cure Vs. Palliation**

- Currently 70% of all cancer patients in developing nations can only be offered palliation because of late stage diagnosis
- Early detection and diagnosis, through public and primary healthcare worker education, can bring patients to care when they have a chance of cure

## **Example 2: Prevention Vs. Cure**

- Without strong cancer prevention activities, any treatment investments will be overwhelmed by expanding morbidity/demand as behavioural risk factors and median population age increase

# Public Health Imperatives

Cancer control in developing nations must:

- Create governmental and public awareness of -- and de-stigmatize -- cancer
- Dispel the myth equating a cancer diagnosis with death
- Shift the 70-30% balance of palliation over cure – we can and must get the cure rate up through earlier detection and treatment
- Rigorously and aggressively mobilize to prevent adoption of behaviours and lifestyles that cause cancer

# Horizontal and Vertical Cancer Capacity Building

## Needed System **Investments** in Cancer Infrastructure to Maximize Synergies and Public Health Impact

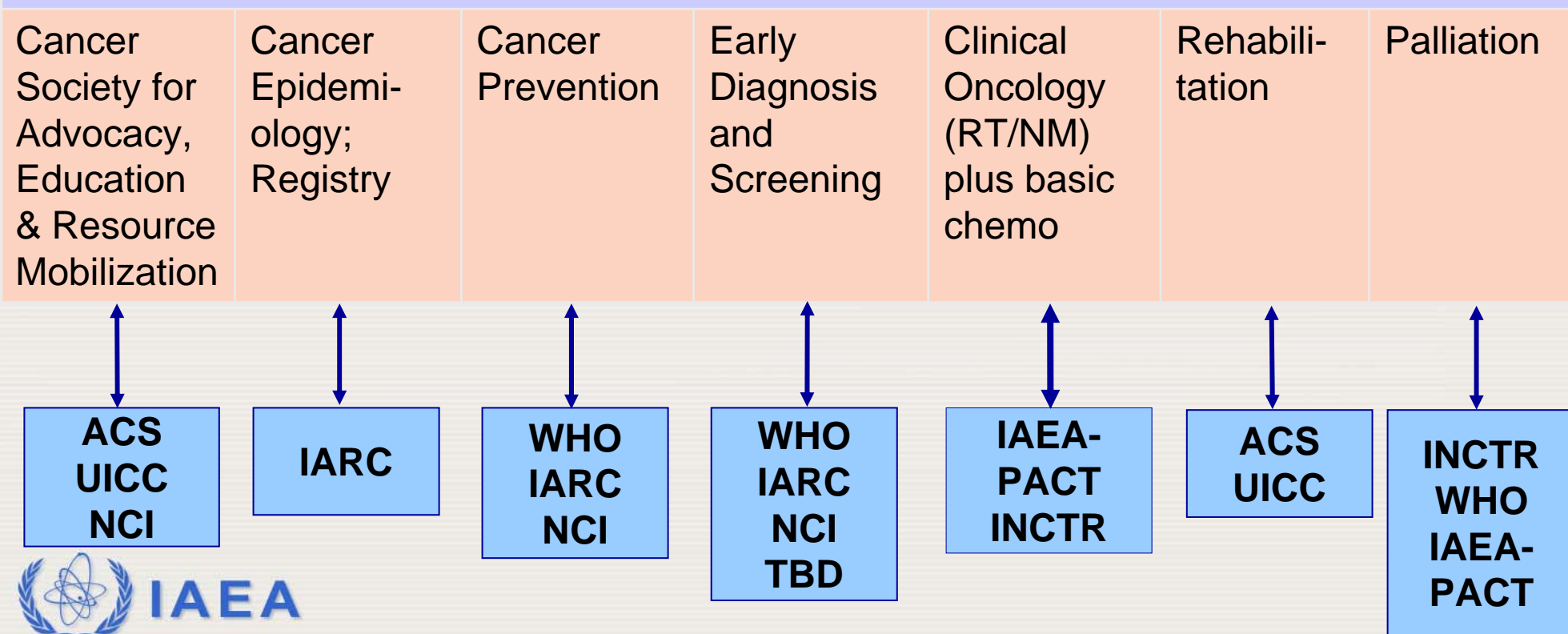
Cancer Society for Advocacy, Education & Resource Mobilization	Cancer Epidemiology; Registry	Cancer Prevention	Early Diagnosis and Screening	Clinical Oncology (RT/NM plus basic chemo)	Palliation (Opiates, RT, other)	Rehabilitation
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**IAEA-  
PACT**

# Horizontal and Vertical Cancer Capacity Building

**Interagency Cancer Control Coalition Partnered with Member States to Advance National Cancer Strategy and Action Plan**



# Mobilizing Funds

- Fundraising for cancer must be based on **systematic, consistent** and **transparent** programme development
- A comprehensive approach at the country and global levels will deliver results and provide the basis for mobilising funds
- PACT seeks to place cancer on the **global international health agenda** and compel the attention of donors



# Initial Country Focus: *imPACT Review*

- The *integrated missions* of PACT (**imPACT**) is developed as a tool to assist governments in reviewing their cancer management infrastructures and assessing national needs to raise funds and to plan and build adequate cancer care capacity
- **imPACT** is the first step in any national execution of PACT and comprises an interagency needs assessment for cancer capacity building from prevention through palliation
- **imPACT** is multidisciplinary and multi-stakeholder, involving not only IAEA expertise, but also that of WHO, IARC, UICC, INCTR and other leading cancer care agencies and institutions
- Utilized by Member States and coalition to raise funds, and to plan and build adequate cancer care capacity

# ***imPACT* Outcome**

- Main product of **imPACT** -- a **National Cancer Strategy and Action Plan** authored by the Member State with technical and policy support from the IAEA, WHO, and coalition
- IAEA emphasis is on radiation therapy and nuclear medicine
- WHO and partners focus on prevention, early diagnosis and other areas of cancer control
- Complementary products are **Specific Action Plans** to meet prevention, control or treatment needs

# PACT Strategic Alliances

## Covering the spectrum of disease through collaboration:

- Early detection: to increase ratio of curable cancers (WHO and other partners)
- Prevention (WHO and other partners)
- Curable cancers: curative treatment (IAEA and INCTR)
- Incurable cancers: palliative care including morphine and RT (INCTR, WHO and IAEA)

# PACT 2006-07 Focus

## Over the coming biennium PACT will:

- Form a suite of critical strategic, interagency alliances with other cancer care leaders
- Complete 20+ interagency cancer capacity need assessment missions to help drive creation of National Cancer Strategy and Action Plans
- Develop at least one major operational framework and funding proposal to advance multidisciplinary cancer care training in an international network of training centres
- Launch at least three pilots in representative developing nations – aim; one model country in each WHO region

# PACT 2006-07 Focus: Cancer Control Training

- The critical bottleneck to advancing cancer care capacity, whether in treatment or prevention, is training of staff
- PACT and strategic partners must accelerate multi-disciplinary, cancer care training if investments in programmes, technology and facilities are to have maximal public health impact and be synergistic
- Training should be largely South-South where feasible, sustainable and oriented toward creating regional and national self-sufficiency
- Within cancer treatment, past and existing investments are at risk, from loss of staff while establishment of other regional treatment centres is critically limited by availability of trained staff, therefore

# PACT 2006-07 Focus: Cancer Control Training

- Goal 1: Create national self-sufficiency and train replacements
- Goal 2: Train multidisciplinary cancer control personnel for creation/expansion of additional cancer control centres in your nation
- Goal 3: Serve as regional hub or centre of gravity for multidisciplinary cancer care training among your neighbours

# Network of Regional Cancer Training Centres

- For cancer treatment, combine radiation and medical oncology
- Accelerate training under a model curriculum; medical physics and RTT model curricula standardized
- Similar curricula and training processes adapted for other multidisciplinary cancer care training gaps (e.g., cancer society, prevention, epidemiology, early detection and diagnosis, palliation, etc.)



# Network of Regional Cancer Training Centres

- Use remote, web-based learning in combination with South-South, in-person training within countries and regions to minimize personal dislocation
- A global network of 30-40 regional and national cancer care training centres, supported by major donor investments and interagency coalition



# Network of Regional Cancer Training Centres

- A strategic component must include articulating economic and employment models that enable Ministries of Health/Education to make commitments to trainees on issues such as employability and sustained income
- For cancer treatment/clinical oncology, PACT will fund the creation of a model curriculum with defined competencies and clinical performance standards, and involve leading cancer care centres, North and South, in programme development
- Regional strategy for diffusion to build neighbour capacity

# PACT Expected Outcomes: Resources and Actions

- Integrated national strategies, action plans, and programmes for **broad cancer control**
- Strategic alliances cutting across cancer care – and staff training to ensure sustainability and self-sufficiency
- Greater public health synergies and value from radiotherapy through concurrent investment in **systematic cancer control**



# Horizontal and Vertical Cancer Care Capacity

Investments are needed across the cancer system to maximize the impact of radiotherapy

<b>Cancer Knowledge Transfer</b>					
<b>National Cancer Control Programme Planning and Management</b>					
<b>Multidisciplinary Education and Training in Cancer Systems</b>					
<b>Cancer Society for Advocacy, Education &amp; Resource Mobilization</b>					
<b>Cancer Prevention</b>	<b>Cancer Surveillance System and Epidemiology including Cancer Registry</b>	<b>Screening and Early Detection</b>	<b>Diagnosis and Treatment (Radiotherapy/ Nuclear Medicine, Chemotherapy and Surgery)</b>	<b>Pain Relief and Palliative Care (Opiates, Radiotherapy, Other)</b>	<b>Follow-up, Rehabilitation, and Support for Patients and Families</b>