

PACT

IAEA Programme of Action for Cancer Therapy



Massoud Samiei
PACT Programme Manager



IAEA

International Atomic Energy Agency

The Burden of Cancer

- Cancer kills 7 million people each year
- 25 million live with cancer; over 10 million new cases this year, more than half in developing countries and increasing
- By 2020, cancer could kill over 10 million, while new cases could rise to 16 million per year unless we act
- Radiation and nuclear oncology is an essential and integral component of cancer care
- In spite of assistance programmes, developing countries not able to deal with this epidemic today
- More than 2 million lives can be saved by 2020 if appropriate measures are put in place to prevent, detect early, diagnose, and cure

PACT: IAEA's Response ...

- Programme of Action for Cancer Therapy (PACT) is the IAEA's response to the cancer challenge in developing countries
- The long-term objective of PACT is:
Sustainable National Capacity for Cancer Care

IAEA Expenditure on Cancer-Related Technical Cooperation Projects 1980-2004*



* These figures do not include IAEA's corresponding overhead costs or the Regular Budget

Agency has a Unique Opportunity

- Today: about \$15 million/year in core-funded cancer therapy TC projects
- Tomorrow: Need to invest \$100s of millions more to meet spiralling demand driven by climbing disease incidence
- Unique opportunity to maximize the public health value derived from ongoing and past investments to launch an ambitious effort to fully meet treatment needs and embed this in broad cancer capacity building
- Other cancer system investments and advancements must occur concomitantly and holistically to increase cancer care capacity
- This can be accomplished through strategic inter-institutional alliances with WHO, IARC, UICC and others, and reliance on IAEA's existing NA and TC programmes

PACT and TC are Complementary

PACT, as a new vision for radiotherapy transfer within a broad cancer capacity building framework, will complement TC and other existing programmes and enhance their value by:

- Relying on best IAEA planning, management and technical inputs' experience
- Mobilizing new resources for TC projects to enlarge Agency's presence and their public health impact in Member States
- Strengthening Member States' abilities to develop longer term project proposals that contribute to a systematic, coherent national vision, strategy and action plan for cancer care
- Focusing and filtering all cancer capacity building investments on the vital imperatives of ensuring sustainability and self-sufficiency within Member States

The Vision for PACT

- Build sustainable national cancer care infrastructure and capacity towards eventual self-sufficiency through South-South and North-South partnerships
- Systematically plan and build capacity to diagnose and treat all patients with radiosensitive cancers
- Focus on eliminating all cancer morbidity and mortality from unmet treatment needs among patients for whom radiotherapy is most effective
- Deploy consistent and predictable resources and processes including investments from private donors to meet these objectives over a 5 to 10 year strategy

Where Are We Today?

- IAEA Board approval in 2004; PACT office established early 2005
- Engaged substantial steps to strategize and operationalise PACT
- Public awareness campaign initiated through public service announcements, web-site development, and national outreach seminars
- Engagement with WHO, IARC, PAHO, ACS, and others
- WHA resolution in May 2005 welcomes PACT and asks for a possible joint WHO-IAEA programme
- PACT is being operationalised using specific mechanisms such as **imPACT** (integrated missions of PACT)

imPACT for Sound Plans & Policies

The *imPACT* Review will:



Treatment using a High-Dose-Rate
brachytherapy machine

- Assist governments to review, analyse and formulate *National Cancer Strategies* and *Action Plans* for capacity building from prevention through palliation
- Enable institutions to build and develop human resources and plans for capacity in radiation and nuclear oncology

imPACT for Mobilising Funds

The results of *imPACT* will enable governments to:



Patient set-up for treatment with a teletherapy machine

- Work with partners
- Focus on centres of competence/reference to deliver quality cancer care
- Raise public awareness of cancer prevention, diagnosis, and therapy
- Apply best practices, expand and continue professional development

Expected Outcome: **Resources and Actions**

- Integrated national strategies, action plans, and programmes for broad cancer control
- Greater public health synergies and value from investment in radiotherapy through concomitant investments in systematic cancer control
- Sound policies and plans for high quality and safe application of radiation and nuclear oncology
- Centres of competence for radiation and nuclear oncology in each developing country appropriate for its needs, mentored by a network of regional centres
- Strategic alliances cutting across cancer care to ensure sustainability and self-sufficiency