

# Political and Practical Opportunities for Global Cancer Financing

Union for International  
Cancer Control



**Eduardo Cazap, MD, PhD, FASCO**

[ecazap@slacom.org](mailto:ecazap@slacom.org)

[ecazap@uicc.org](mailto:ecazap@uicc.org)

UICC Past-President

SLACOM President

Washington, Nov 15, 2016

# Disclosures

- Leadership Position ( no honoraria) SLACOM, UICC, SIS,, NCI of Argentina
- Consultant or Advisory Role : Bayer; Schering Pharma, Roche, Pfizer
- Honoraria : Bayer; Bristol-Myers Squibb ; Fresenius
- Research Funding: Paid to Institution: Poniard Pharmaceuticals ; Daiichi Sankyo Pharma ; Breast Cancer Research Foundation (BCRF)

I have not relevant disclosures related with this presentation

# Agenda

- Overview
- Global funding ; country funding or combinations
- Political will , champions and some examples of successful stories
- South-south cooperation
- The whole of society model. One recent experiment in Argentina
- Conclusions

# Some personal reflections

## Are we truly global?

- Communications are global
- Information is global
- Economic markets are global
  
- But, Is Cancer care global?: NO in actions but YES in problems and challenges

E. Cazap, unpublished

# Some personal reflections

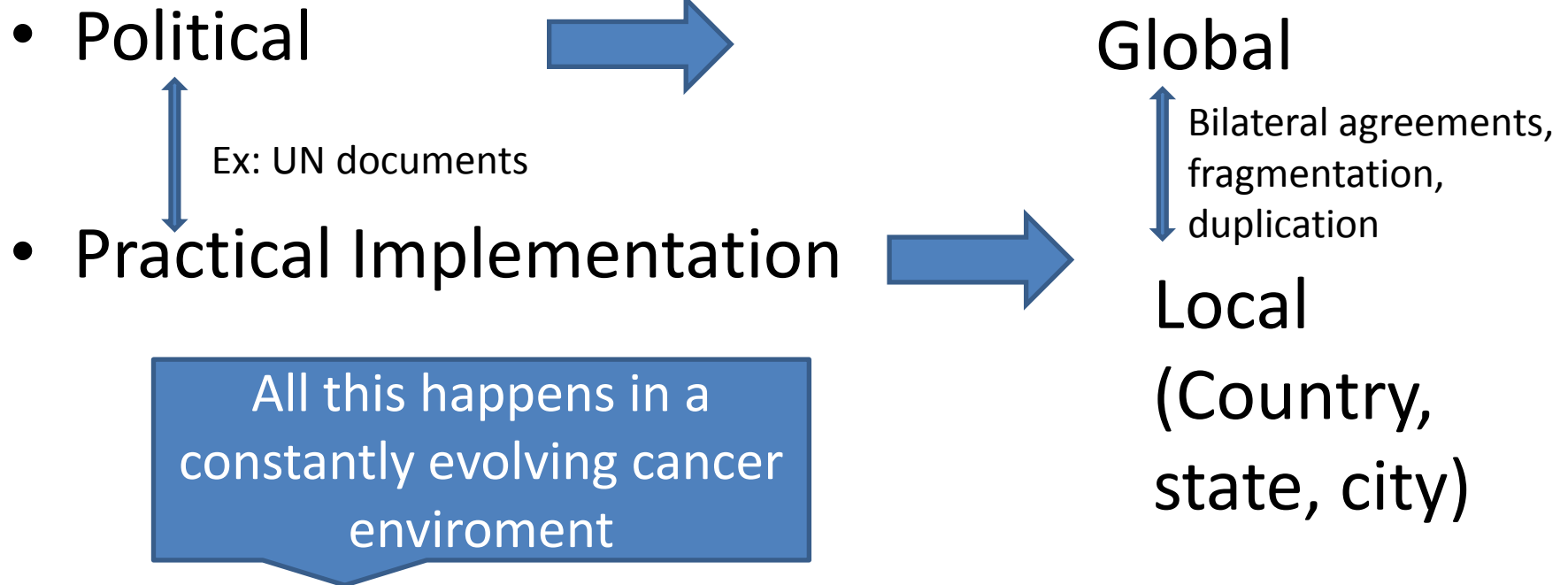
## Cancer care in LMIC's?

- High income: Generally better results in curability and survival. More costs and overdiagnosis
- LMIC: Generally poor investments, low curability and survival
- High income-low results: In some Arab countries you have high technology but insufficient experts and workforce
- LMIC-Good results: With proper strategies and good plans according to resources. Uruguay, Costa Rica, Singapore, Turkey, Morocco, etc

# Cancer care in LMIC's.

- Better cancer care is not only dependent on budgets. Small but continuous investments in health with adequate NCP and good epidemiological data can make important changes

# Global Factors



We need urgently functional , efficient, cost effective and integrated health systems operating within universal health care

# Main Health Care Systems Philosophy

- Mainly an individual responsibility. –USA
- Developed in different degrees of governmental and individual responsibilities – some European countries, Canada, Australia , most of Latin America,etc



# Global governance dysfunctions

- Inadequate policy space or compliance
- Institutional weaknesses
- Democratic deficits
- Corruption
- Weak accountability
- Poor monitoring
- Missing Institutions

Ref. <https://globalfutures.georgetown.edu/essays/global-governance-for-health>

Modified by E. Cazap

# **KEY** for the fight against cancer

- Structure and efficiency of health care systems, together with universal health coverage
- Mainly in the public sector, tailored to each individual environment

Ref. Lancet 2012; 379:4

# The crucial need of political leadership and champions



Prof Franco Cavalli,  
Medical Oncologist  
and politician. Switzerland

# STOP CANCER NOW!

On this World Cancer Day 2013, participants of the World Oncology Forum raise the alarm about the increasing devastation caused by cancer across the world

Cancer is not only one of the biggest global killers but also one of the fastest growing causes of death. The annual number of new cases is expected to double over 25 years, to reach 22 million by 2030. The greatest burden will be felt in emerging countries. Acting now will save untold human suffering.

Every year cancer drains around \$900 billion from the world economy through lost output and the cost of care – 1.5% of global GDP.

At the 2012 World Health Assembly governments unanimously agreed to reduce preventable deaths from non-communicable diseases by 25% by 2025. For cancer, this would mean saving at least 1.5 million lives every year. Current strategies cannot come close to achieving this goal. A new and determined set of actions to foster research, modify lifestyles and environments, redesign health systems and reform health policy is urgently required.

**Governments, policy makers and everyone who can help stop unnecessary deaths from cancer must take action to:**

**Prevent preventable cancers:**

1. Wage war on tobacco, by far the biggest cause of cancer death across the globe. Extend to all countries the anti-tobacco measures already found to be effective and tax the profits made from tobacco.
2. Give people the knowledge they need to understand which cancers threaten them most, and how to reduce their risk; develop and implement scientifically sound strategies, including vaccines, to protect against cancers caused by infections.

**Treat treatable cancers:**

3. Develop early detection programmes tailored to local needs and resources, which target cancers that are the most detectable and treatable and have the greatest social impact.
4. Ensure that every cancer patient has access to a package of indispensable diagnostics and curative and palliative care that has been shown to get the best possible results within the local setting and is delivered by trained health professionals.

**Support all those who are living with cancer:**

5. Give all patients access to optimal pain control by changing attitudes and removing bureaucratic, legal and logistical barriers to the medical use of morphine.

6. Involve patients as partners in decisions about their own care and give them a voice in decision making about policies that affect them.

**Accelerate finding cures for cancers that are not yet curable:**

7. Replace the current broken business model for developing new therapies with more efficient forms of public-private collaboration, geared to accelerating delivery of affordable therapies that are of real benefit to patients across the world.

**To achieve all the above:**

8. Educate policy makers and the public to counter the entrenched fatalistic myths and misconceptions that undermine efforts to mobilise forces against cancer and deter people who suspect they may have cancer from seeking early medical advice.
9. Promote and strengthen sustainable and universally accessible health systems that are supported by innovative financing mechanisms, and are driven by evidence about cost-effective ways to deliver the best results and not by vested economic interests.
10. Ensure that all countries have a clear cancer control strategy that evolves in the light of needs and experience, and is built on creative ideas, backed by solid evidence, in order to turn back the tide on cancer.



The World Oncology Forum (WOF) was a gathering of leading cancer researchers, clinicians, policy makers, industry representatives, patient advocates and journalists. It was convened by the European School of Oncology on the occasion of its 30th anniversary in Lugano, Switzerland, on 26-27 October 2012, in partnership with *The Lancet*.

Further information available at:  
[www.worldoncologyforum.org](http://www.worldoncologyforum.org)

Hold under the patronage of



and with the support of



**WOF WRITING COMMITTEE**

**Franco Cavalli**,  
Oncology Institute of Southern Switzerland, CH

**Julio Celis**,  
Danish Cancer Society Research Center, DK

**Alberto Costa**,  
European School of Oncology, IT

**Alexander Eggermont**,  
Gustave Roussy Cancer Institute, FR

**Mary Gospo**  
Princess Marg

**Richard Horton**,  
The Lancet, UK

**John Ioannidis**,  
Stanford University School of Medicine, US

**Umberto Veronesi**,  
European Institute of Oncology, IT

**Kathy Redmond**,  
Cancer World, CH



# Stop cancer now ! recommendations (WOF)

(1)

1. Inform people about risk factors
2. War on tobacco
3. Avoid infections (vaccines)
- 4. Improve early detection according to resources**
- 5. Provide essential treatment package**

Ref. World Cancer Forum, Lugano- Lancet, 4th February 2013

# Stop cancer now ! (WOF)

(II)

6. Destroy barriers for opioids
- 7. Develop cost-effective treatments**
8. Dispell myths
9. Give voice to patients
- 10. Force governments to act ( e.g. national cancer plan, international cooperation)**

Ref. World Cancer Forum, Lugano- Lancet, 4th  
February 2013

# Accelerate finding cures for cancers that are not yet curable:

Proposal. Replace the current broken business model for developing new therapies with more efficient forms of public-private collaboration, geared to accelerating delivery of affordable therapies that are of real benefit to patients across the world.

Ref. World Cancer Forum, Lugano- Lancet, 4th  
February 2013

# 1986: La Mascota Project (Nicaragua)

## **150-200K USD/year** **Long-term twinning program**

- training and supervision of health professionals in pediatric oncology
- use of protocols tailored to the local possibilities
- clinical research (mentality)
- use of part of resources for social help
- building inpatients - outpatients structures and laboratories facilities

**Result: curability of childhood cancer in Nicaragua changed from less than 20% to more than 60 %**

Ref Lancet 1998; 352:1923-26



# The case of Uruguay



Dr Tabare Vazquez , President of Uruguay. Radiation Oncologist

## Cancer care

- Universal health coverage
- 7<sup>th</sup> country in the world free of smoke
- Champion in anti tobacco actions
- National Cancer Commission
- Universal coverage in cancer prevention by law

# The case of Morocco

# HRH Princess Lalla Salma



Princess Lalla Salma, born Salma Bennani is the princess consort of Morocco. She is the wife of King Mohammed VI

# "Lalla Salma Foundation - Prevention and Treatment of Cancers."

- Lalla Salma Association Against Cancer was founded in 2005.
- The Foundation has mobilized efforts to raise public cancer awareness throughout Morocco, launched an ambitious building campaign, organized the first national cancer registry and linked arms with an array of international partners in the fight against cancer.
- The Foundation is already making significant inroads in improving the quality of cancer management and the ensuring that all Moroccan patients have access to a high standard of cancer care.
- Early detection projects in breast and cervical cancer are underway
- The Foundation oversees a program of tobacco control in partnership with the Ministry of Health and business and education leaders

# Cancer Control in Morocco

- National Plan for Cancer Prevention and Control (NPCPC) was launched in 2010; has a budget allocation of 850 million USD for 2010-19
- 35 million people, 36,000 new cancer cases, 23,000 cancer deaths
- 2,626 Basic Health Centres (BHCs), 97 general hospitals and 37 specialised tertiary care hospitals, and four University Medical Centres (UMCs), 27,350 beds and 38,000 health care professionals
- Two population-based cancer registries (Casablanca and Rabat)
- Lung, prostate and large bowel cancers in men and breast, cervix and large bowel cancers account for 44% and 60% of cancers in each gender respectively
- Primary prevention activities: tobacco and alcohol control, promotion of healthy life styles, Hep B vaccination
- Has early detection programs for breast (CBE, triple testing) and cervix cancer (VIA) scaled up in 7 of 12 regions in the country
- The number of women screened for cervical cancer was 177 011 (6.6%) and for breast cancer was 1 093 538 (31.4%) in the year 2015

# Cancer Control in Morocco: cancer health care infrastructure

- 20 comprehensive cancer treatment centres (9 public) with 1045 beds
- 4 public paediatric oncology services
- 34 linear accelerators (half public) and 9 brachytherapy services (3 public)
- 366 day care chemotherapy chairs (216 public)
- 3 public bone marrow transplantation services
- 172 trained oncologists (119 in public service), 163 pathologists (78 in public service), 450 radiologists (231 public), 49 physicists (29 public)
- 56 CT scanners (all public), 45 MRIs (8 public), 7 PET scans (1 public), 75 diagnostic mammography equipment in public service, 12 gamma camera (8 in public), 31 public histopathology labs, 60 colposcopes in public service
- Constructed several dormitories to reduce Rx abandonment
- Palliative care: Since 2013 prescription of morphine for 28 days without maximal dose restrictions is possible
- Per capita consumption of morphine has increased from 0.04 mg in 1995 to 0.35 mg/person in 2010

# Health care financing in Morocco

- The Moroccan government allocated 2% of its GDP to health in 2014
- Morocco introduced health care financing schemes such as AMO, covering 7.9 million people 2005, INAYA in 2007, RAMED, covering 8.5 million people in 2011 for the economically disadvantaged populations
- Morocco spends 10% of health budget for cancer control and care
- Morocco is taking initiatives to achieve universal health coverage (UHC) in due course

# The case of Thailand



# The State of Cancer Control in Thailand

- Has nationwide cervical screening program; will scale up HPV testing
- Pilot HPV vaccination completed in Ayutaya province (targeting 57,000 girls)
- Phased HPV vaccination will be introduced in 2017 and will cover the entire country by 2020
- Colorectal cancer screening is currently being scaled up in primary care
- Has a network of 30 comprehensive cancer treatment centres, 11 university hospitals, 61 speciality hospitals, 94 regional/provincial hospitals and 784 district hospital where various types of cancer care can be accessed.
- Has 52 radiotherapy machines, 340 CT scanners, 58 MRI machines, 260 mammography machines in public sector
- Almost three fourths of cancer care infrastructure and human resources is in public sector

# Organization of Cancer Health Services in Thailand

Ministry of Public Health

30 Comprehensive Cancer Hospitals  
94 General Hospitals

- Advanced imaging
- Treatment: SX, RT, CT
- Cancer registry
- Research

740 Community Hospitals

- Screening
- Diagnosis
- Treatment
- Surgery

12,000 Primary Care Units

- Primary prevention
- Screening

Village Health  
Volunteer

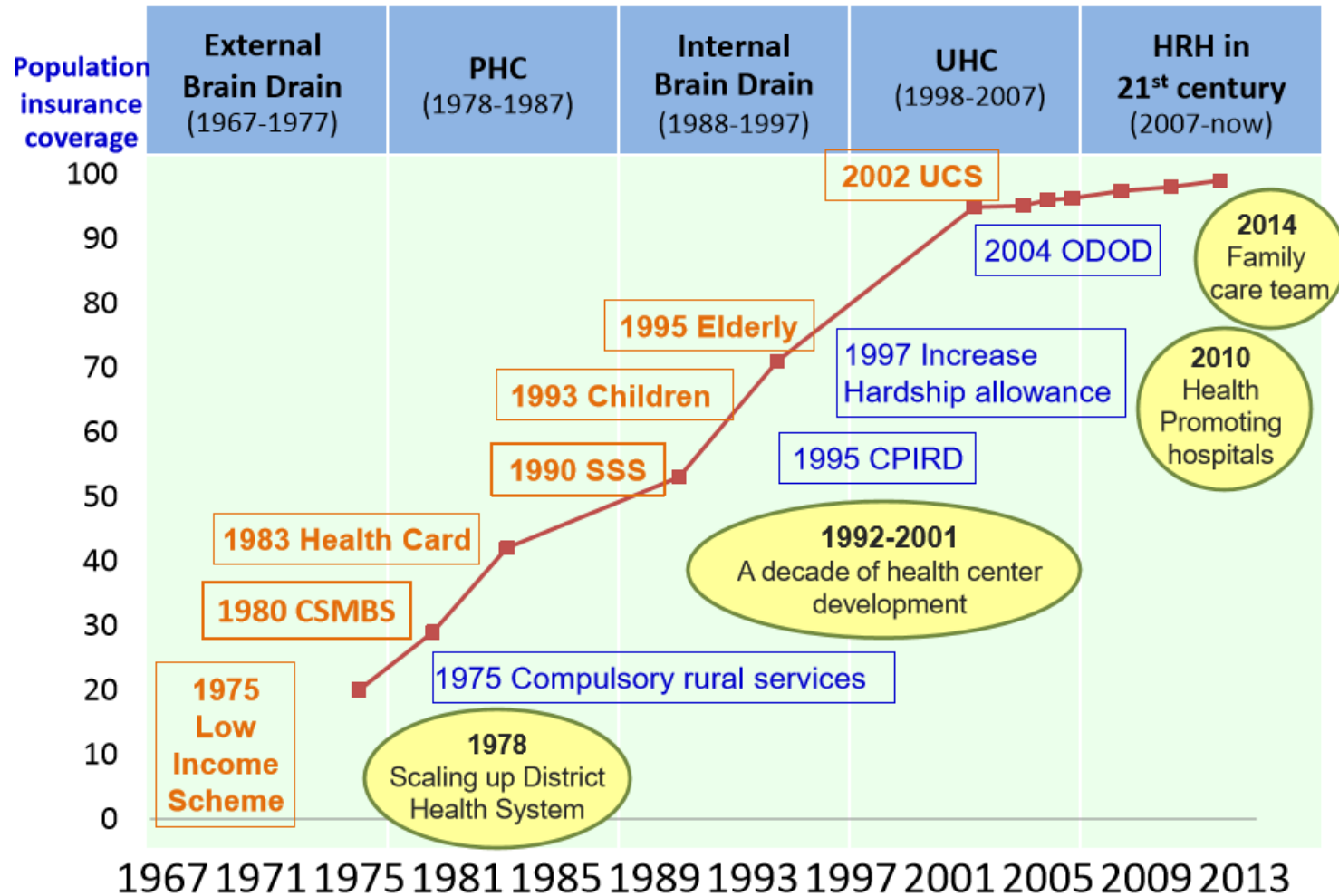
Village Health  
Volunteer

Village Health  
Volunteer

Primary prevention



# Evolution of Thai health systems and financial protection



# China

# Universal health coverage in China

- Establishment of the State Council Medical Reform Committee in 2006
- Three year action plan 2009-2011 (125 Billion USD direct investment)
- 12th 5-year plan 2012-2017
- During 1995-2010 Gov. Health expenditure increased from 17.1 billion USD to 171.5 Billion USD
- Urban Employee Basic Medical Insurance (UEBMI) (1998, 252 million people)
- National Cooperative Rural Medical Scheme (NCRMS) (2003) (832 million people)
- Medical Assistance Program (2003)
- Urban Resident Basic Medical Insurance (URBMI) (2008) (221 million)
- Above cover 95% of the population; remaining 5% by private health insurance

# Jordan- HRH Princess Dina Mired



- Former Director General, King Hussein Cancer Foundation
- President Elect UICC
- Honorary Chairperson of the Jordan Breast Cancer Programme
- Honorary Co-President ,Harvard University Global Task Force for Expanded Access to Cancer Control and Care in the Developing World
- LIVESTRONG Global Envoy for the Lance Armstrong Foundation



# Michael R. Bloomberg

- WHO Global Ambassador for Noncommunicable Diseases
- Founder of Bloomberg Philanthropies
- Active advocate for antitobacco and low sugar actions
- Examples of implementation in NYC
- Collaborator with Uruguay in the Philip Morris against Uruguay litigation
- Now working in NCD's
- Leader in public health campaigns

# Questions

- Successful examples in LMIC's settings could be extrapolated to other world regions?
- It is feasible to duplicate successful examples through south-south collaborations?



# The value of Public-Private partnerships

- Several countries and groups are working following this concept
- The development of Consortiums constituted by Academy, International cooperation, Local leaders and Institutions, and MoH's and HCS's together with private groups are viable and useful partners
- A true cooperation in cases that each stakeholder alone is unable to develop the project shows better outcomes

# The Rwanda case

- Public private partnerships
- Extrapolation of successful experiences in similar contexts
- Implementation of real world actions
- Cost-effectiveness of Radiotherapy

# Some examples of completed projects



# Case #1 – Santo Domingo, Dominican Republic

- MDL was chosen to be the radiation therapy provider for the leading hospital in the Dominican Republic
  - Relationship with the hospital makes center the most recognized and respected in the Dominican Republic and the Caribbean, and generates a steady stream of patients
  - IFC<sup>1</sup> provided loan for the project
- State-of-the-Art Center
  - Constructed new center on the hospital's campus and signed long-term lease contract
  - Purchased new Varian linear accelerator
  - Opened in October 2014
- Market Overview
  - One-third of country's residents living in relevant geographic area
  - Hospital / 21C / MDL Partnership to promote center outside of Dominican Republic





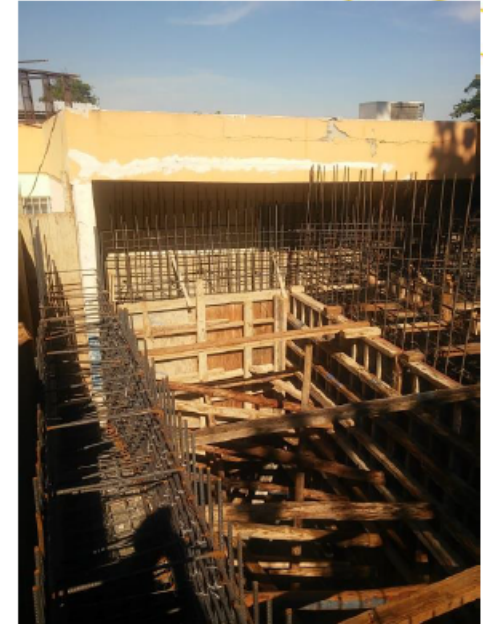
# Case #2 – Tijuana, Mexico

- MDL identified a radiation center in Mexico that was using 25+ year old technology
  - Previous owners elected to sell to MDL instead of making costly investments in center leasehold improvements and modern equipment
  - Renting center from prior owners under long-term rental agreement
- MDL refurbished center
  - Brought up to current code
  - Installed Varian Linear Accelerator
  - Opened May 2015
- Underserved Market of 4 million
  - One competitor using Cobalt
- MDL elevating quality of care in region
  - Acknowledged by IFC<sup>1</sup>
  - IFC provided loan for project
- Mexican regulators increasingly strict
  - Less willing to renew cobalt licenses, essentially encouraging technology transition
  - Cobalt-to-Linac involves constructing new vault, leasehold improvements, & machine replacement



# Case #3 – Santiago, Dominican Republic

- Public Hospital with 50 years of operations needed to discontinue use of a Cobalt machine
  - Public Hospital did not have capital to modernize
  - MDL will bring center's quality of care up to its U.S. standards
  - MDL built a new vault and will install a modern Varian Linac
- Hospital Arrangement
  - Finalized long-term lease contract in 2015
  - MDL to install linear accelerator in 1H 2016
  - MDL to operate center and pay the Hospital rent
- Partnership Benefits
  - Elevate quality of care available to Public Hospital's patients
  - Access to premier global radiation oncology network
  - MDL to offer local partners / physicians an option to purchase Membership Interests
- Market
  - Second largest city in country
  - Two non-MDL competitors with Linacs



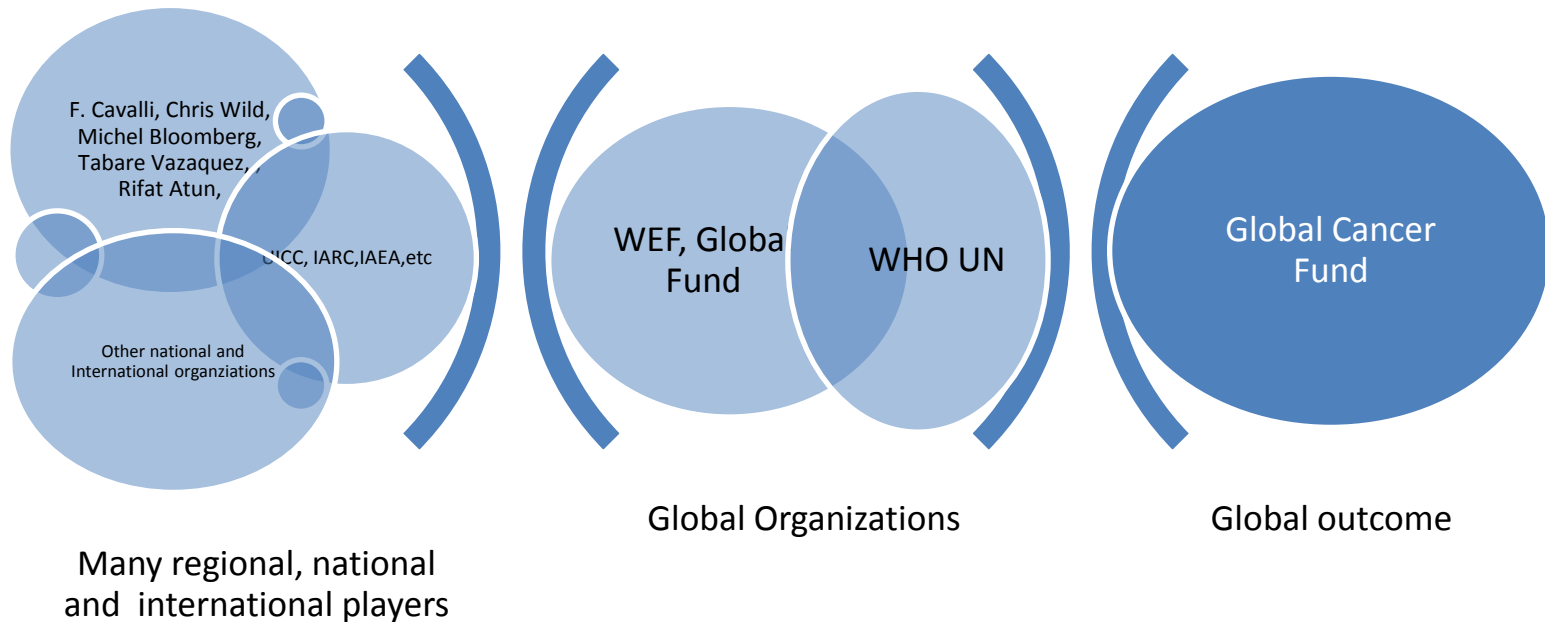
# The “whole of society” approach



Lakec foro 2.mp4

An experiment in Argentina

# A strategy for a Global Cancer Fund





# Take home messages

- Cancer is not only a medical problem, it is a development issue.
- The scientific knowledge exists, but only applies to less than 20 % of the world population
- The main challenge is implementation
- We are now in the moment of moving from documents and declarations to the application of rational, innovative and strategic actions to overcome barriers and be applied to as many world populations as possible.
- Political will and leadership is vital for implementation

# Aknowledgments

- Chris Wild, IARC: general concepts
- R.Sankaranarayanan IARC: Morocco and Thailand
- Larry Schulman: Radiotherapy projects
- Franco Cavalli: China, WCF, La Mascota proj.
- Tabare Vazquez : Uruguay

Thank you very much for your  
attention