

The International Cancer Expert Corps (ICEC): mission, progress, challenges



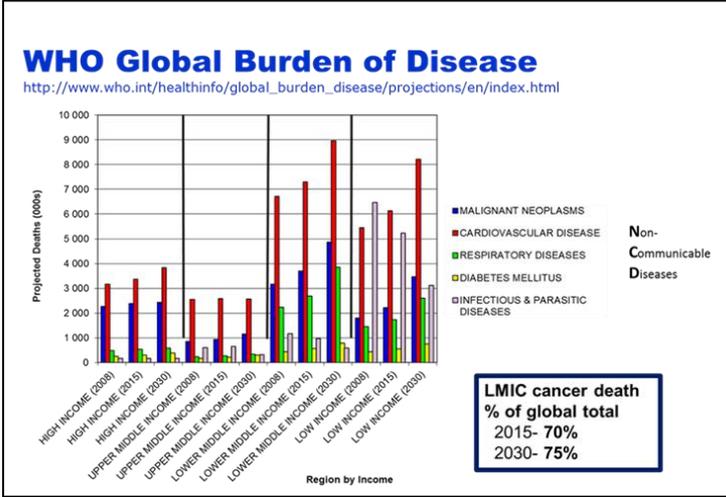
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ICEC/CERN-#2 meeting

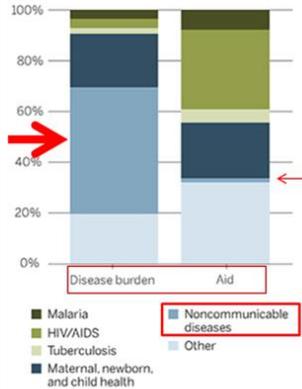
STFC, ICEC and CERN, Geneva October 2017

- No financial conflict of interest
- ICEC is a not-for-profit 501 (c) 3, NGO. I serve as Senior Scientific Advisor. No compensation
- **Views expressed are those of the presenter.**
- No endorsement by NCI, NIH, ASPR, DHHS. No endorsement by any U.S. Government agencies has been given or inferred

Problem we are addressing:
 Global shortage of cancer care as an approach to NCDs
 Spectrum of cancer care with the **need/metric** for radiation therapy **as an essential component of spectrum of cancer care.**



Skewed funding For NCDs
 The diseases that cause the highest burden—expressed in disability-adjusted life years, or DALYs—don't get most of the international largesse. In 2010, HIV/AIDS



Source: Institute for Health Metrics and Evaluation

1. Big and growing LMIC burden of cancer →

2. Huge gap in care, including essential radiotherapy →

3. Inadequate investment in NCDs

Cancer care continuum: Taking care of cancer also addresses NCDs and Infectious diseases

1. Prevention, screening,
diagnosis (pathology,
diagnostic imaging)

2. Treatment- surgery,
radiation, chemotherapy:
Multi-modality expertise

3. Sustainable care-
access, public health;
Centers of Excellence



Trained workforce-
capacity, capability

Quality assurance-
technology and technique

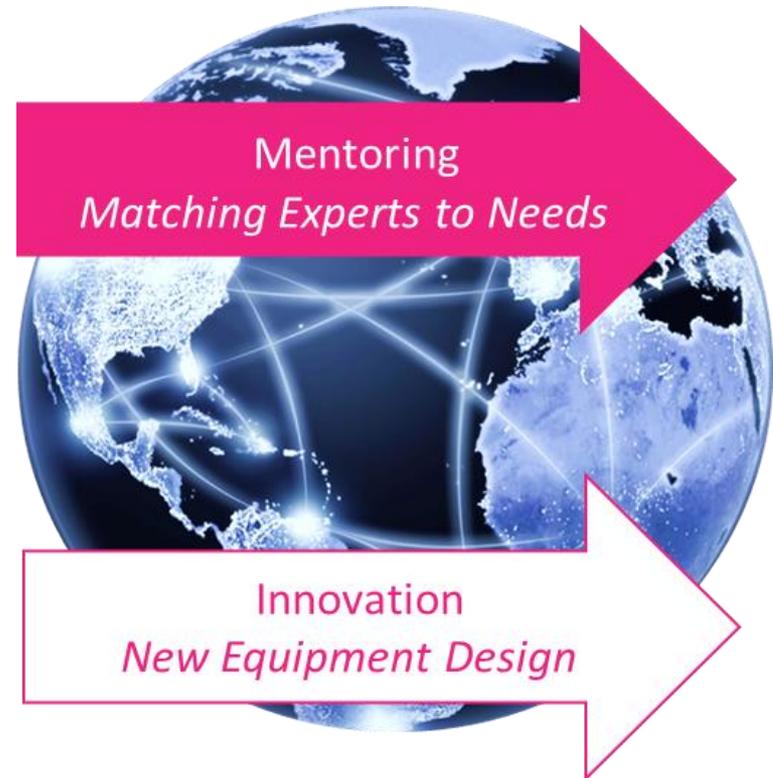
Cost, affordability
Healthcare system



Strengthened healthcare infrastructure

Vision

ICEC envisions a world in which everyone has access to interventions to prevent and treat cancer and its symptoms using high-quality best practices for the local circumstances.



2 prongs: Expertise on site with mentorship & the tools that work are needed



ICEC Paths

ICEC Mentoring Model

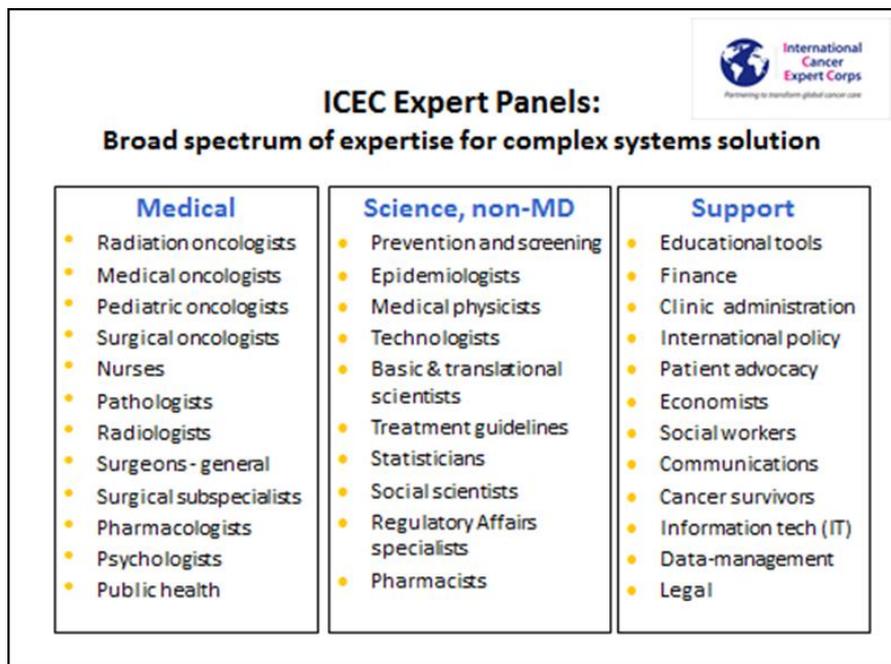
- Establish **Hubs** of expertise
 - Academic medical centers/universities
 - Private practices
 - ICEC Central Hub
- Populate them with **Expert Mentors**
 - Affiliated with a university/practice or ICEC Central hub
 - Individual physicians and other necessary allied healthcare workers
 - Global Health track practitioners
 - Retirees: bringing altruism back to medicine
- Identify **Centers and Associates**
 - Centers: Clinics/hospitals/ and other care delivery sites in underserved areas
 - Associates: Physicians/allied health care workers seeking mentoring/education to guide cancer care to global standards

ICEC Innovation: New Equipment Design

- **Radiation therapy poses unique challenges in LMICs**
 - Radioactive Cobalt-60 machines present possible environmental and security risks and lack sophistication needed for modern radiotherapy
 - Need for **practical, accessible and affordable technology resources** (including radiation equipment) exist to deliver necessary and high quality cancer care
- **ICEC**
 - **Serve as a convener** to engage stakeholders to promote innovation in new technologies, such as the design of a novel linear accelerator for challenging environments

ICEC: sustainable mentorship model

Career path **essential**; *breadth of expertise*
for cancer care

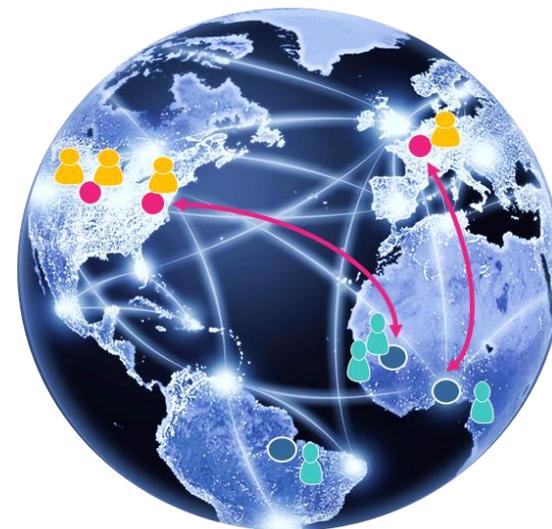


Program support



Developing global
health expertise

Twinning Projects



1. Multiple sectors, including academia →

2. Bona fide metrics and accomplishments →

3. Sustainable improvements in healthcare

Supporting “Twinning projects” and the draft 5-Step Plan

1. **Need formality, SOPs and metrics** for assessing progress and for funders/reviewers.
2. **This is step toward LMICs being part of global oncology-** work with IAEA, ASTRO, ESTRO, etc
3. **Build together with interested partners, minimize duplication of efforts** and try to avoid “donor dilution”

Step 1	Step 2	Step 3	Step 4	Step 5
Associates and Centers Establish ICEC Relationship	Finalize ICEC Expert Commitments and Initiate Mentoring	Demonstrate Protocol-based Patient Care; Join Global Oncology Activities	Becoming a Recognized Regional Cancer Center	Approaching Independence; Progress to Become an ICEC Hub

Initial pilot projects, interested experts, early career leaders are at work and committed....



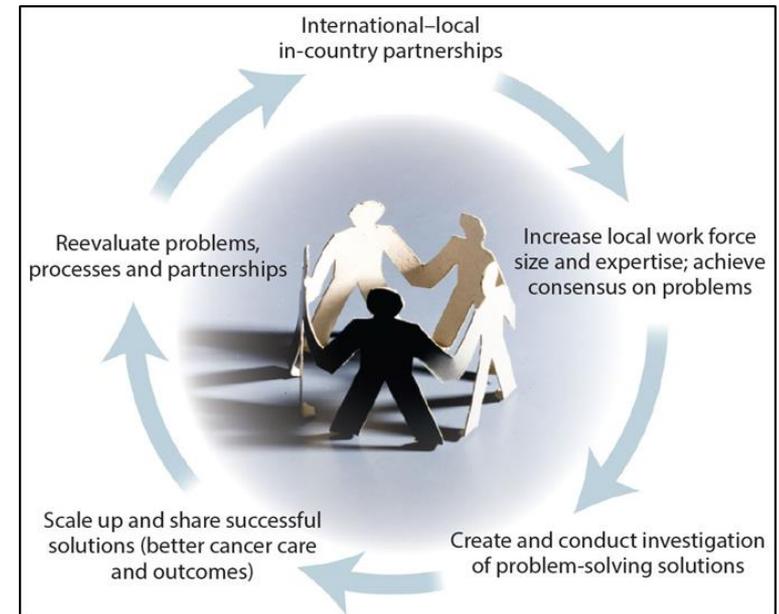
**International
Cancer
Expert Corps**

Partnering to transform global cancer care

Global partnerships: interdisciplinary
Gov't, NGO, industry, healthcare, economics, societies,
individuals



Think globally, mentor locally.



Collaborators, partners, investors, supporters welcome:

www.iceccancer.org