



60 Years

Atoms for Peace and Development

Lessons... the IAEA perspective

zubi

The big numbers

- ✓ Only 1 in 10 pts have access to RT in LIC
 - ✓ Only 4 LIC outside Africa
 - ✓ In Africa more countries without RT than with RT...
- ✓ and 5-6 in 10 in LMIC
- ✓ 3377 additional Mv units needed
- ✓ 13.7 billion needed

IAEA NAHU

IAEA Technical Cooperation Programme

IAEA PACT and AGaRT

GTFRCC

Individual initiatives



IAEA - our role

To promote...
To support the
implementation...

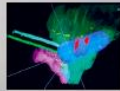
Setting Up a Radiotherapy Programme:

Clinical, Medical Physics,
Radiation Protection and Safety Aspects



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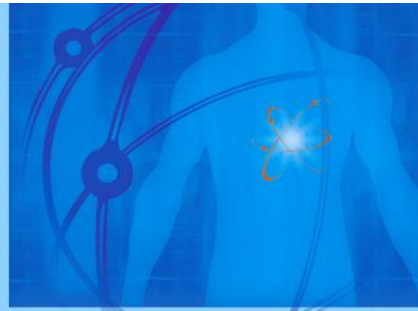
Planning National
Radiotherapy Services:
A Practical Tool



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Implementation of
High Dose Rate
Brachytherapy in Limited
Resource Settings

IAEA HUMAN HEALTH REPORTS No. 10



Radiotherapy Facilities:
Master Planning and Concept
Design Considerations



IAEA-TECDOC-1588

*Transition from 2-D Radiotherapy to
3-D Conformal and Intensity
Modulated Radiotherapy*



May 2008

IAEA HUMAN HEALTH REPORTS No. 12



The Transition from
2-D Brachytherapy to
3-D High Dose
Rate Brachytherapy





IAEA - our role

To educate and train...



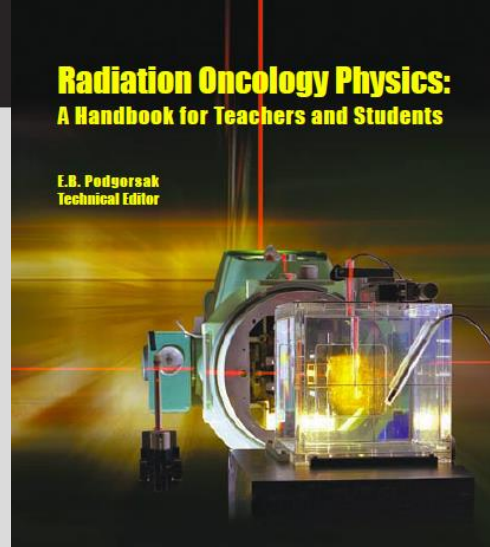
Clinical Training of Medical Physicists Specializing in Radiation Oncology

IAEA
International Atomic Energy Agency

VIENNA, 2008 TRAINING COURSE SERIES **37**

Radiation Oncology Physics: A Handbook for Teachers and Students

E.B. Podgorsak
Technical Editor



Sponsored by the IAEA and endorsed by the COMPCCPM, EFOMP, ESTRO, IOMP, PAHO and WHO



A Handbook for the Education of Radiation Therapists (RTTs)

TRAINING COURSE SERIES **58**



IAEA Syllabus for the Education and Training of Radiation Oncologists

Endorsed by the American Society for Radiation Oncology (ASTRO) and the European Society for Therapeutic Radiology and Oncology (ESTRO)

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A Syllabus for the Education and Training of Radiation Oncology Nurses

VIENNA, 2008 TRAINING COURSE SERIES **28**



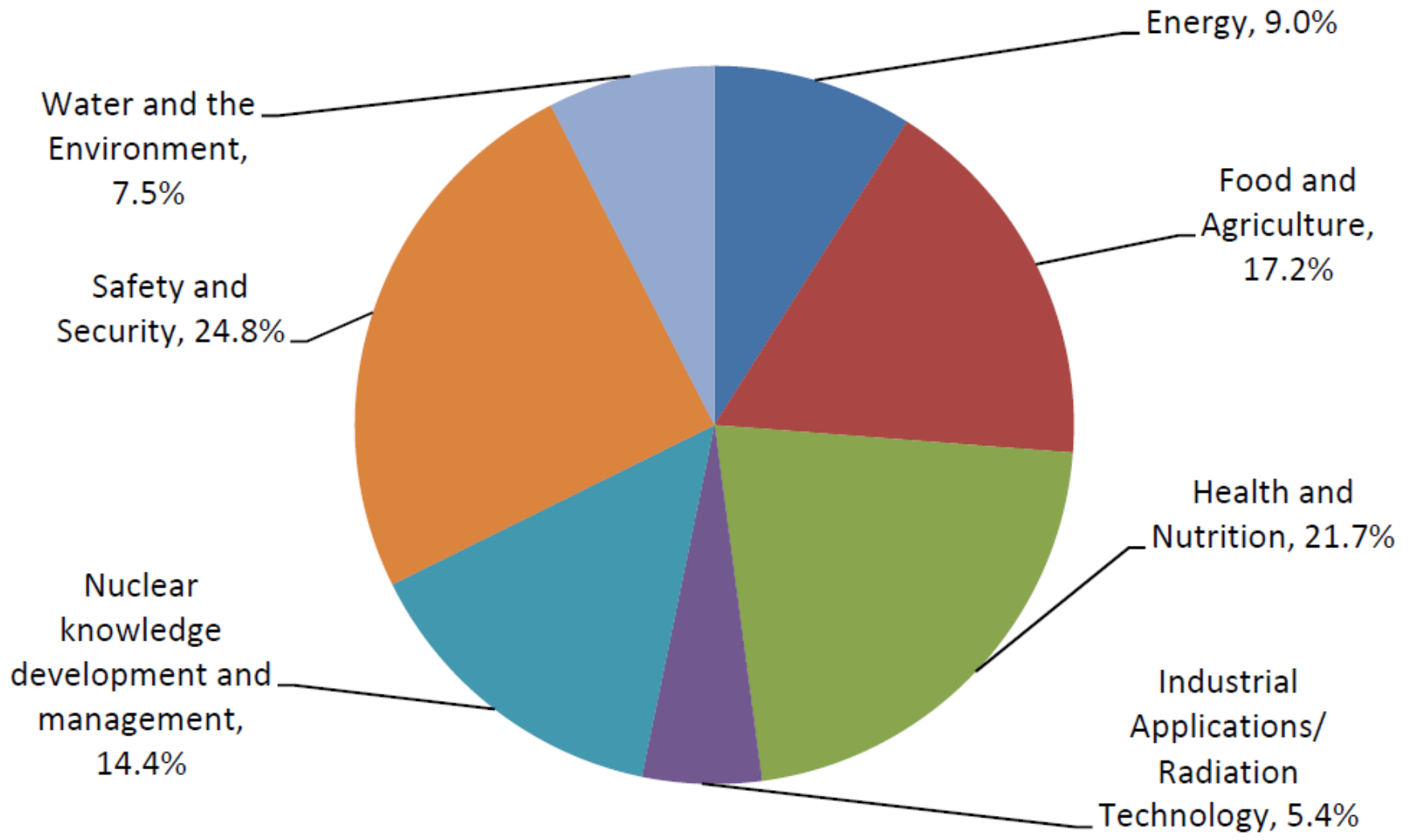
Radiation Biology: A Handbook for Teachers and Students

VIENNA, 2010 TRAINING COURSE SERIES **42**

IAEA TC programme

- 290 million invested in cancer-related projects over the last 30 years (1983-2013)
- Project design-education-training-experts-equipment
- 123 active projects in cancer management in 56 countries
- 96 active projects in nuclear medicine and diagnostic imaging
- 53 active projects related to dosimetry and medical physics
- 44 new projects on cancer management in 2018-19

Technical fields in 2015



2004

PACT



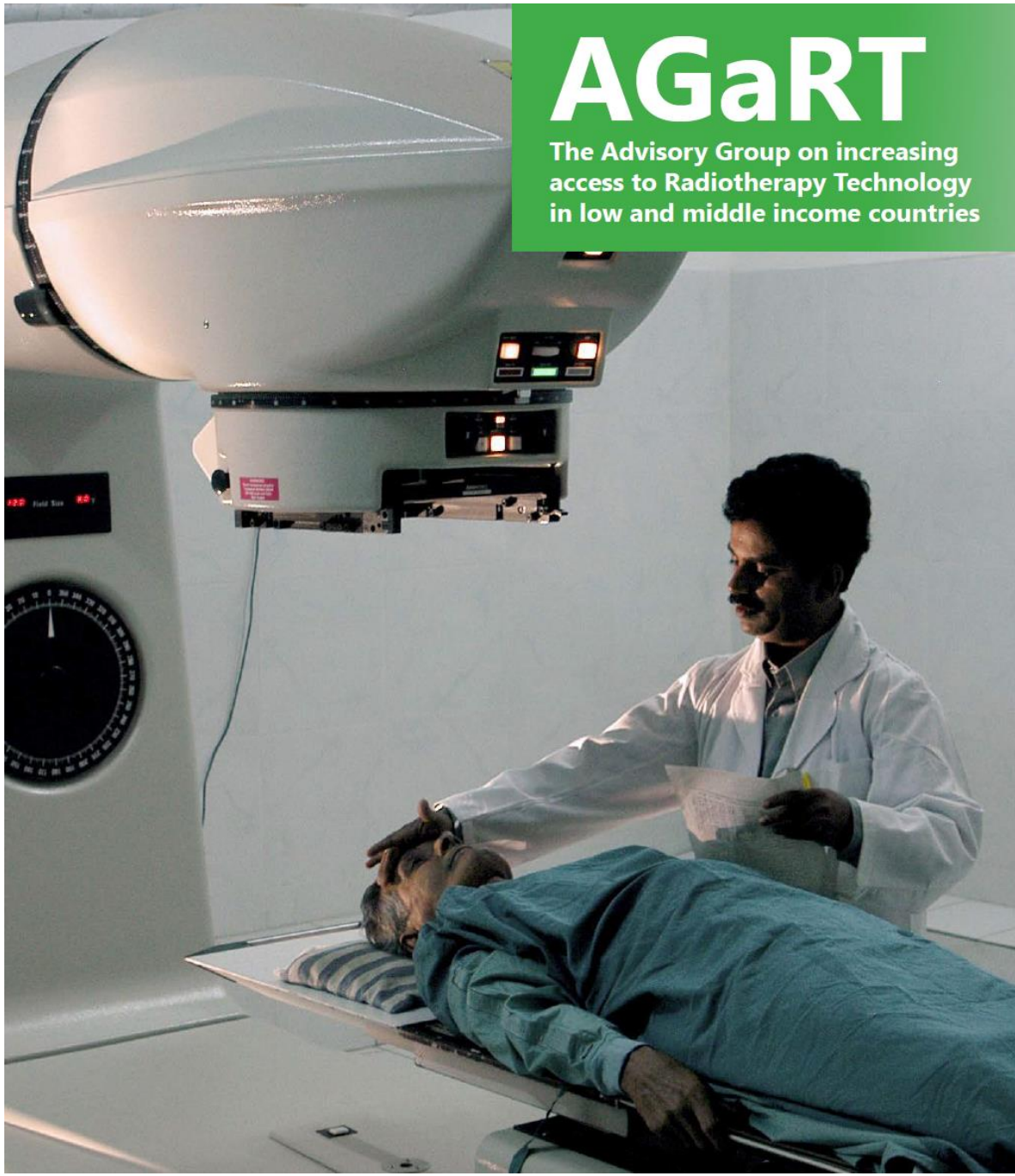
Programme of Action for Cancer Therapy

Report by the Director General

GOV/2004/39

Date: 11 May 2004

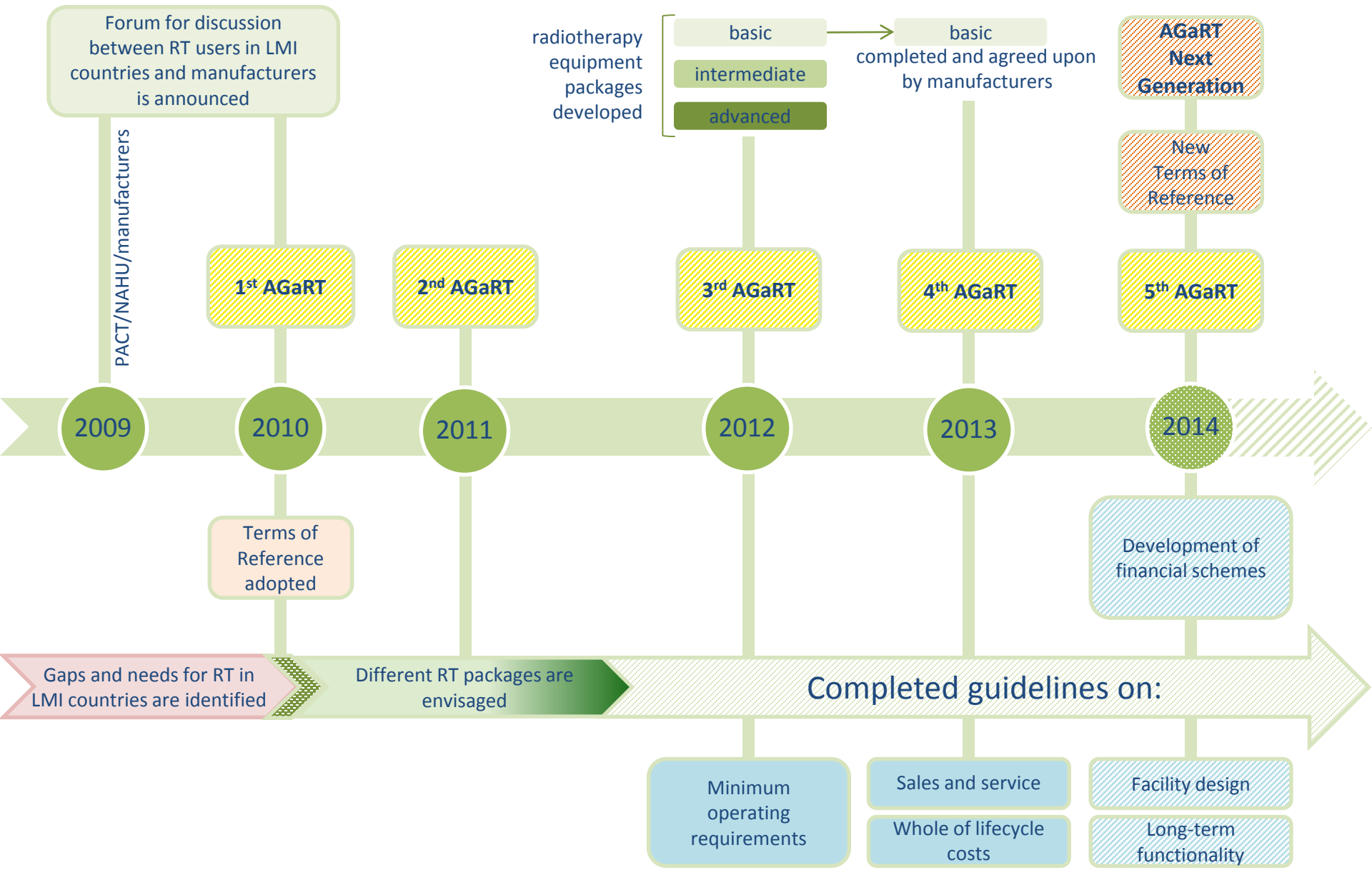
...a new approach that would raise public awareness of the impending crisis in developing countries due to the rapid increase in cancers and the scarcity of radiotherapy equipment and expertise. This approach, named Programme of Action for Cancer Therapy (PACT), would seek to increase our capacity for assisting Member States in providing appropriate cancer treatment, mainly by expanding our fundraising efforts with non-traditional donors.



AGaRT

The Advisory Group on increasing access to Radiotherapy Technology in low and middle income countries

AGaRT Milestones 2009-2014





uicc

global cancer control

A MEMBERSHIP ORGANISATION
FIGHTING CANCER TOGETHER

Challenges in Cancer Control - 2035

M Gospodarowicz - GTFRCC

"We unite the cancer community to reduce the global cancer burden, to promote greater equity, and to integrate cancer control into the world health and development agenda."

Individual initiatives

- U Toronto in Ethiopia
- Dana Farber in Rwanda
- U Pennsylvania in Botswana
- U North Carolina at Chapel Hill in Malawi
- Eldoret, Kenya
- APROSIG in SE Asia
- etc. (there will be others...)

Requirements

- Political stability
- Commitment, ownership, political will
- Available funds
- Medium term plan
 - Establishing 1st RT department
 - Beginning local training
 - Sustainability and expansion

When it works...

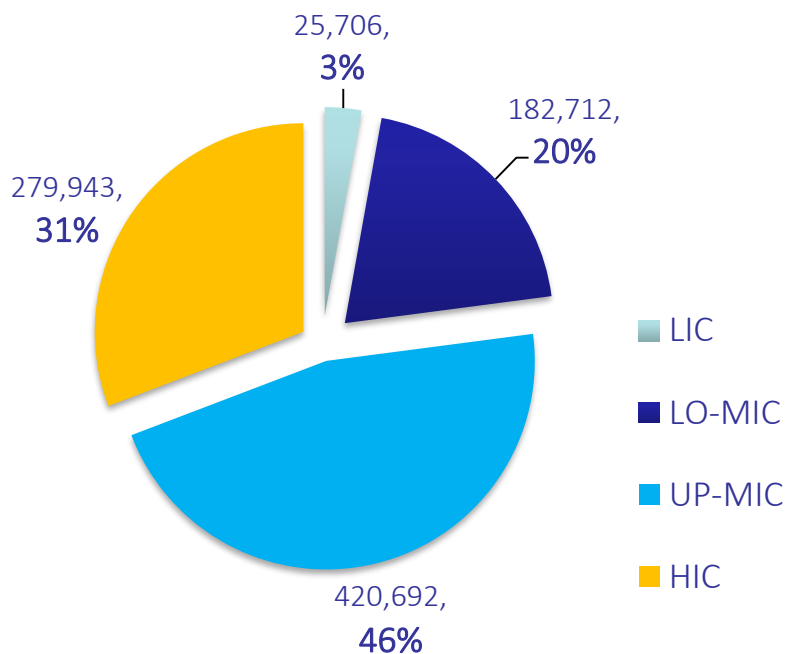


Or when it doesn't...

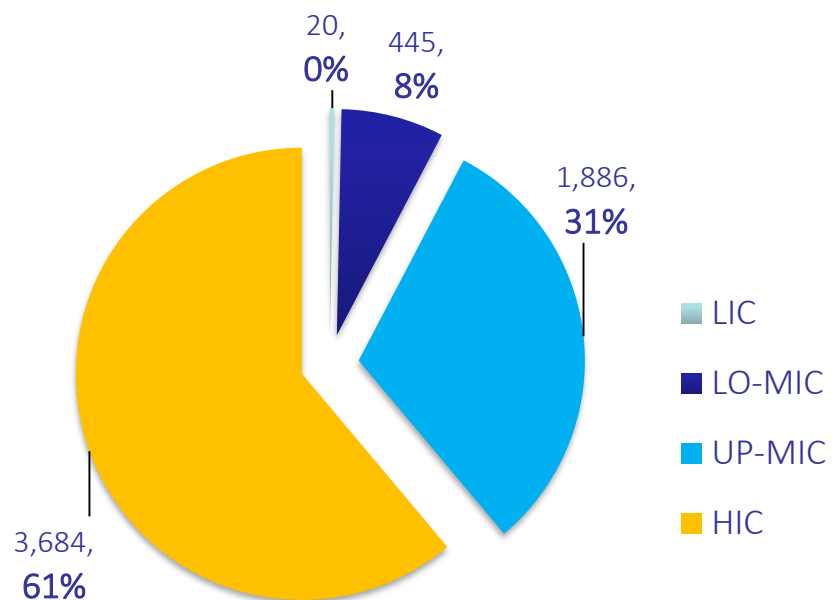


No progress in the last 10 years...

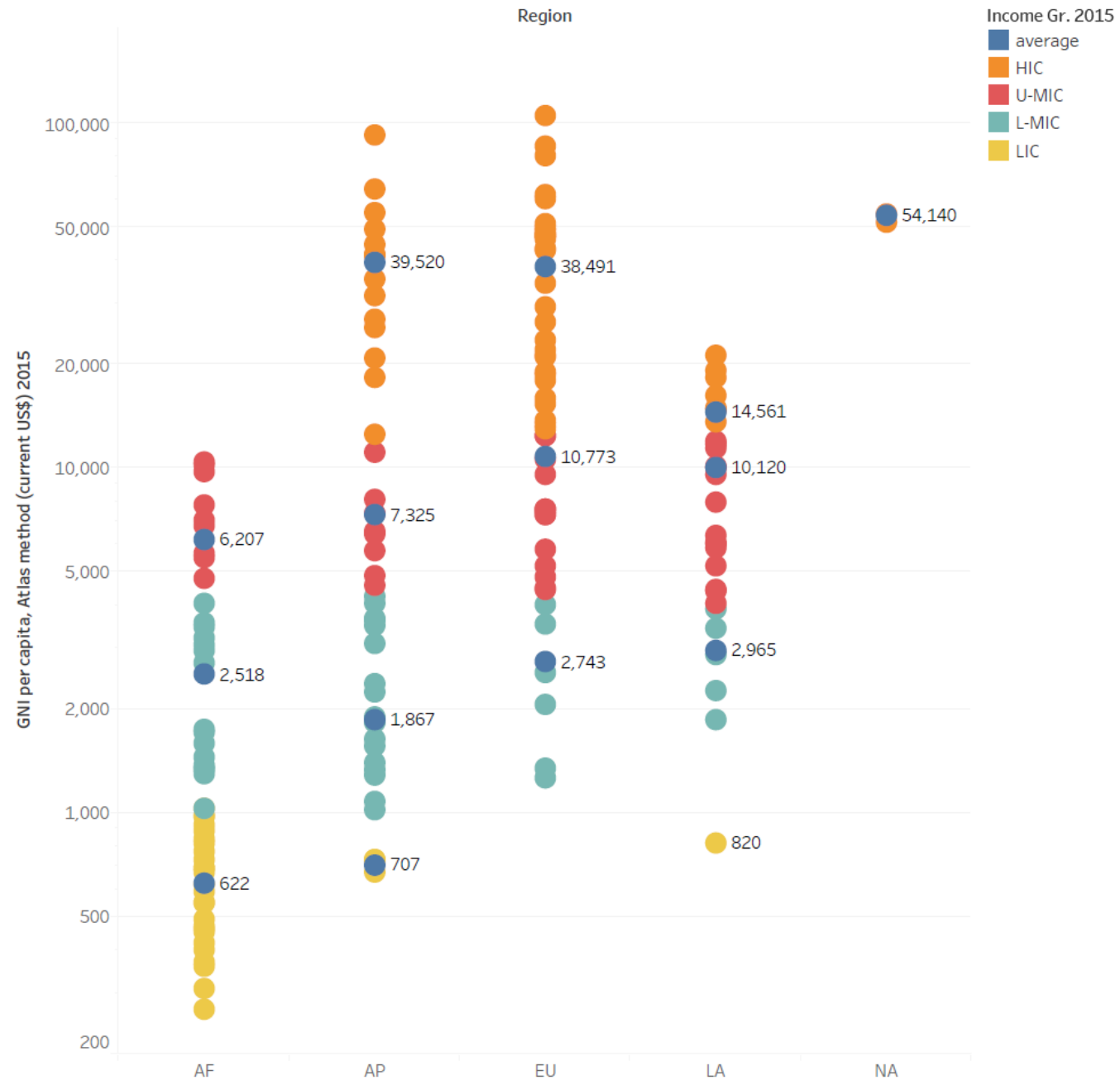
Increase in cases requiring RT from 2002-2012



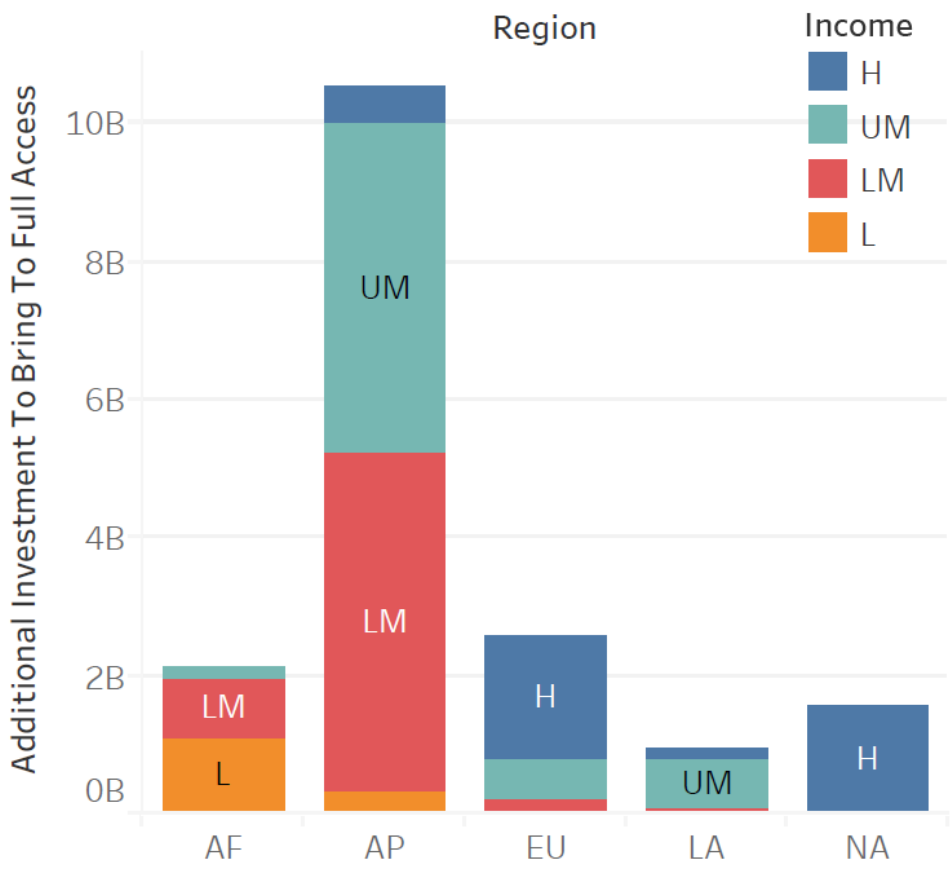
Increase in RT machines from 2004-2013



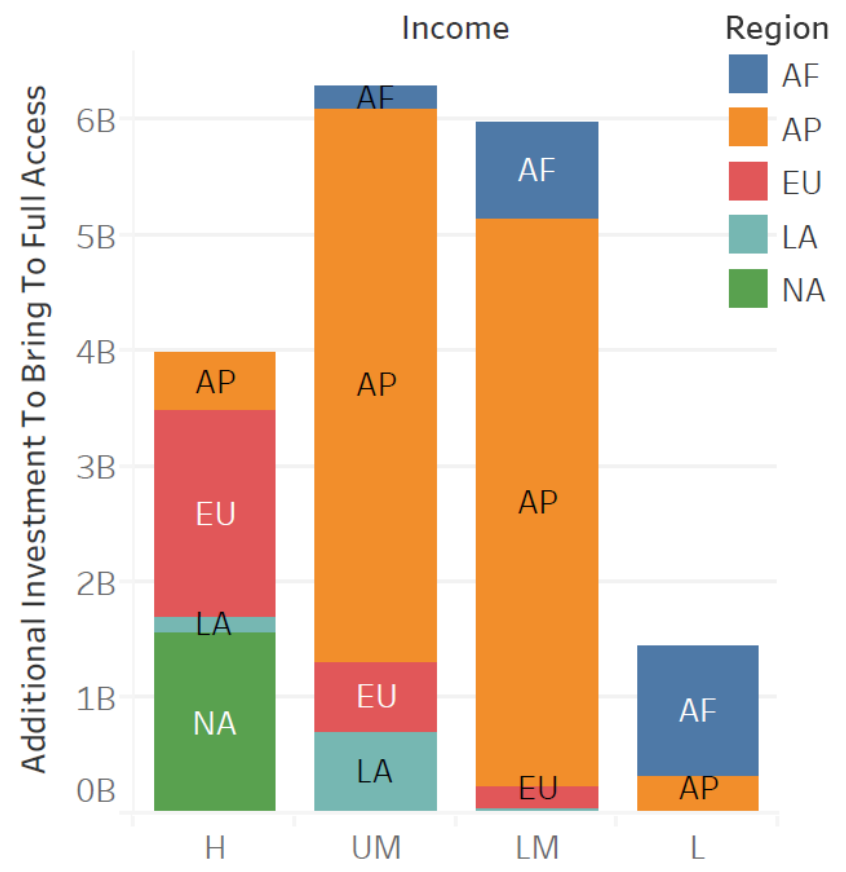
GNI/c per region and income group



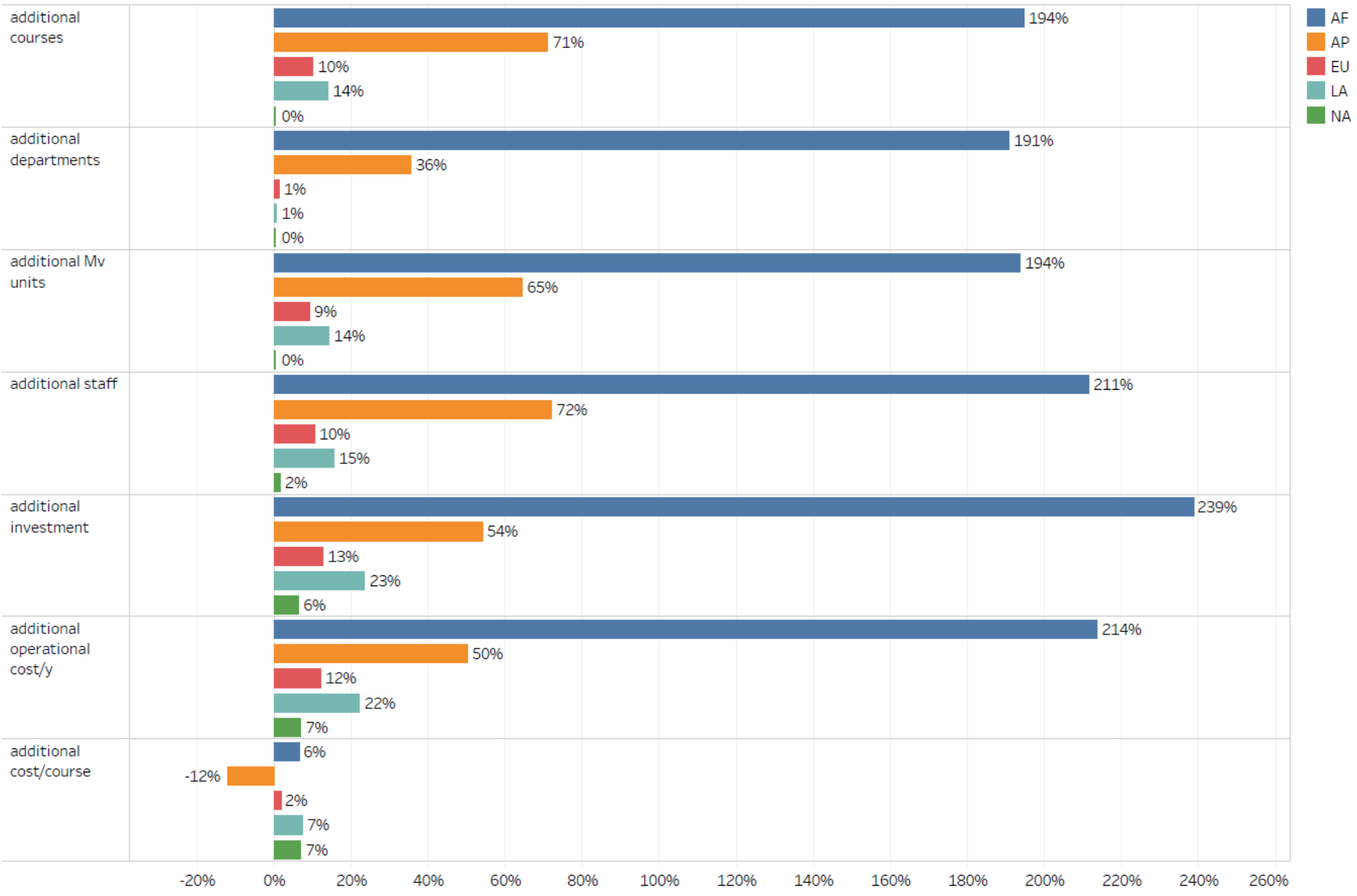
Add investment per region



Add investment per income gr



Additional courses, resources, and costs (percent extra needs)



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