First Steering Panel Meeting on the International Action Plan on the Radiological Protection of Patients
Madrid, Spain, 19 to 21 January 2004.

Pablo Jiménez, Ileana Fleitas
Radiological Health Program
Essential Medicines and Health Technologies
Area of Technology and Health Services Delivery

PAHO ACTIVITIES

XVI IACRS MEETING
ILO, Geneva, 12-13 May 2011

Pablo Jiménez
Regional Advisor in Radiological Health
Medicines and Technologies
Health Systems based on Primary Health Care (HSS)
PAHO is based in Washington, D.C., and has 27 country offices and 9 scientific centers.
PAHO’s RADIOLOGICAL HEALTH PROGRAM

• The Radiological Health Program was established in 1960 for the purpose of promoting the role of the public health authorities in the field of applied nuclear energy.

• In 2010 PAHO celebrated the 50 Anniversary of the Radiological Health Program
MAIN DUTIES

- To promote the proper planning and organization of diagnostic imaging and radiotherapy services;
- To advise on the incorporation and utilization of appropriate health technologies in these services;
- To advise Governments on related regulations and legislation in radiological health.
- To promote QA programs in the field of diagnostic imaging, radiotherapy and radiation safety.
- To support comprehensive educational programs and specific training activities.
- Publishing, cosponsoring and disseminating guidelines and technical documents
REGULATORY INFRAESTRUCTURES
REGULATORY ISSUES

- Only 21 countries of the 35 have **Regulatory Body on Radiation Safety**
- The capacity of these existing Regulatory Bodies are **very limited** in general.
- The implementation of the BSS requirements is still far from optimum.
- The ability of the Health Authorities to properly license diagnostic imaging and radiotherapy services is **weak**.
- There is a lack or poor mechanisms for recognition or **certification of professionals**
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Regulation of Radiological Services

Radiation Safety

Regulatory Body

Request radiation safety as part of QA Programs

Quality Assurance includes Radiation Safety

Quality of Health Care

Health Authorities

Issue authorization
Request QA programs to:
• guarantee patient safety
• improve medical outcome
• justify medical exposures
SPECIFIC ACTIVITIES PLANNED FOR 2011

✓ Updating the regulatory information in PAN, COR, NIC and HON.
✓ Assessment in VEN, COL and PAR
✓ Support some regulatory aspects in ARG
✓ Establish of an Action Plan for BRA
✓ Two Regional Workshops on Evaluation the National Regulatory Framework on Medical Exposures.
✓ Dissemination of new BSS in ICMP 2011 (BRA), ALATRO 2011 (PAN), and in SOVERA 2011 (VEN)
EVALUATION OF RADIOLOGICAL SERVICES

This is a very important ongoing activity to improve quality, safety and access to these services.
Participante en el servicio TLD del OIEA/OPS (Núm. de participaciones/Porcentaje dentro de ±5%)
País con servicio TLD propio (tras participación en el servicio OIEA/OPS)

IAEA/PAHO TLD postal dose audit service for radiotherapy centers in Latin America and the Caribbean Since 1969!

Currently more than 180 radiation therapy beams are verified annually in 21 countries
ACCESS TO THESE SERVICES

- Available diagnostic imaging and radiotherapy facilities varies widely around the Region.

- In most countries, the level of use and access to these services is far lower than in the industrialized countries.

- Access to these services within the country is also inequitable for both geographical and economical reasons:
  - Most of these services are located in big cities, so a large part of the rural population has no access to them.
  - Their high cost also makes them inaccessible to poor urban populations.
Trends in the annual frequency of diagnostic medical and X-ray examinations for each health care level.

NUMBER OF ANNUAL EXPLORATIONS PER 1000 POPULATION

I: Industrialized countries
II: 22 LAC included
III: 5 LAC included

Health Care Level
RADIOTHERAPY CAPACITY
Comparison Latin America and the Caribbean versus industrialized countries in 2010

High Energy Teletherapy Units per million inhabitants in the Region

country
INCORPORATION OF APPROPRIATE TECHNOLOGY
TECHNOLOGY ISSUES

• Weak **health technology assessment capacity**
  ✓ Disproportional **high technology incorporation** for the situation of the Region.

• Lack of **technology management and planning**
  ✓ Many of the technology, purchased or donated, is **still in boxes or clearly underused**

• Increasing **pressure by the industry**
INCORPORATION OF TECHNOLOGY

- Perform studies of feasibility
  - Planning of services
  - Human resources
  - Cost Analysis
  - Maintenance
  - Infrastructures
  - Sustainability
- Prepare technical specifications
- Proceed with purchase when requested
SPECIFIC ACTIVITIES PLANNED FOR 2011

✓ Incorporation of 30 Digital Multipurpose Radiology equipments jointly with Rotary International in GUT
✓ Incorporation of Ultrasound Equipments jointly with Medical Imaging Partnerships in GUY
✓ Assessment of the radiotherapy services in TRT, SUR, GUT and DOR.
HUMAN RESOURCES
HUMAN RESOURCES ISSUES

- There is a clear shortage of Radiologists, Radiation Oncologists, Medical Physicists, Radiological Technologists/Radiographers, and Experts in Radiation Protection.

- Only some countries have a formal education programs of these professionals, but in general follow a poor curricula.

- The possibilities to obtain additional or Continuing Education Training are very limited in many of them.

- There is a lack or poor mechanisms for recognition or certification of these professionals.
We organize and promote many courses and educational activities for:

- Medical physicists
- Radiological medical practitioners
- Radiological technologists and radiographers
- Experts in Radiation Protection
SUMMARY OF COURSES IN RADIOLOGY

55 NATIONAL / REGIONAL COURSES (1990 - 2010)

- 22 Multipurpose Radiology
- 16 Mammography
- 7 Computed Tomography
- 1 Advanced Radiology
- 3 Paediatric chest X-ray
- 4 Interventional Radiology
- 1 Maintenance of Radiology
- 1 Pregnancy
QA COURSES ON RADIATION THERAPY FOR MEDICAL PHYSICISTS AND/OR RADIATION ONCOLOGISTS

- 1998 Ecuador
- 2002 Colombia
- 2004 Uruguay (Clinical QA)
- 2005 Brazil
- 2007 Cuba
- 2007 Colombia
- 2008 Mexico (Clinical QA)

Petropolis, BRAZIL, April 2005
Training Courses Organized

PLANNED FOR 2011

• 2 National courses on Mammography in DOR and NIC
• 1 National course on Digital Radiology in GUT
• National courses on Ultrasounds and on Multipurpose Radiology in GUY
• 1 Regional course on CT in PER
On 11 March the PAHO EOC was activated to level 2 during the first 48 hours.

Since then, the EOC continues at level 1 for monitoring the nuclear emergency.

Information is being received from the Early Notification and Assistance Conventions (ENAC) website.

Participating in the teleconferences with IACRNE member organizations.

Elaborating FAQs tailored to the Region and updating the PAHO website.

Addressing the media from the Region and responding official questions from the Member States.

We have requested the Member States to take the opportunity to revise the national capacities to respond to this type of emergencies.
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