



**Pan American
Health
Organization**



**World Health
Organization**
REGIONAL OFFICE FOR THE **Americas**



WORLD RADIOLOGY DAY CELEBRATION 2013

CURRENT STATUS OF RADIOLOGY IN LATIN AMERICA AND THE CARIBBEAN

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President
Inter American College of Radiology (CIR)



Latin America

20 countries: North, Central, South America and Caribbean region

Greater geographic area than that of Russia, Canada, USA or China

590M inhabitants

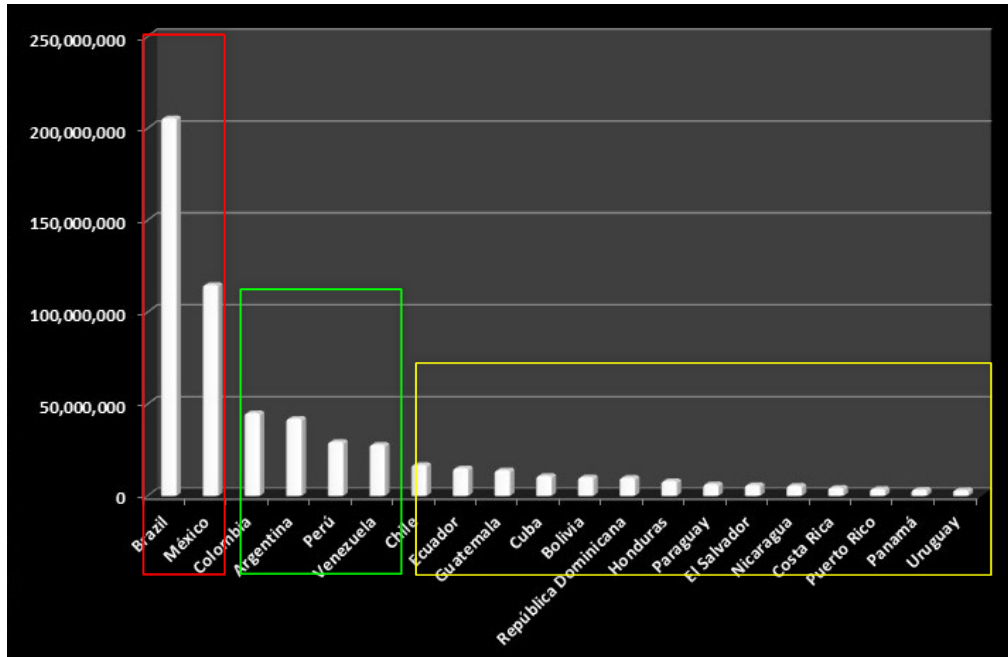
If LA is considered as one country it would be the third most populated country of the world, after China and India

(Greater population than the European Unión -501M inhabitants₍₂₀₁₀₎)



Latin America

Wide range of population among individual countries: 3.3M – 200M



Brazil & Mexico 50%

Uruguay: 1,76% of Brazil's population

Latin America

Non uniform region

Great ethnical, political, economical, cultural and social differences among countries

Poverty and inequality

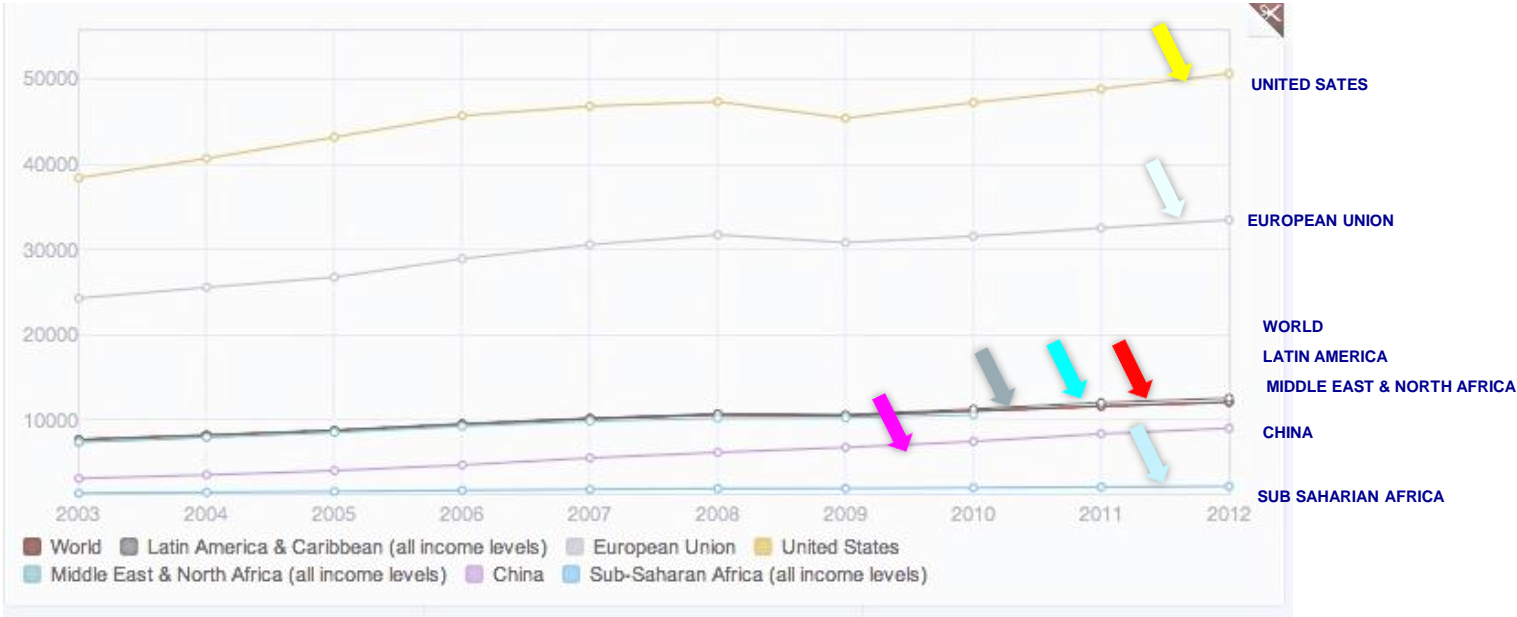
Major challenges





Latin America

GROSS NATIONAL INCOME PER CAPITA PPA (CURRENT US\$)



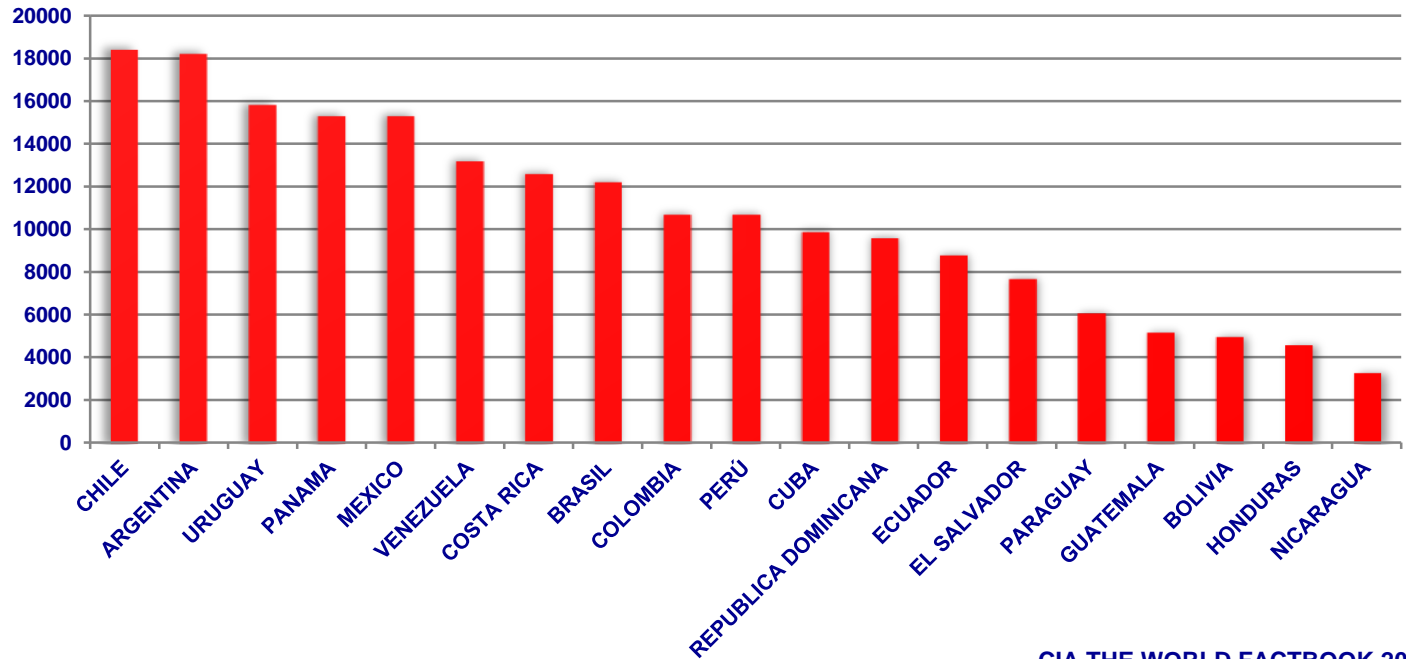


Latin America:

GROSS DOMESTIC PRODUCT PER CAPITA(PPP) 2012 (US\$)

GDP per capita (PPP) 2012

- Range: 3,300 -18,400
- Average: 10,600
- Media:10.700

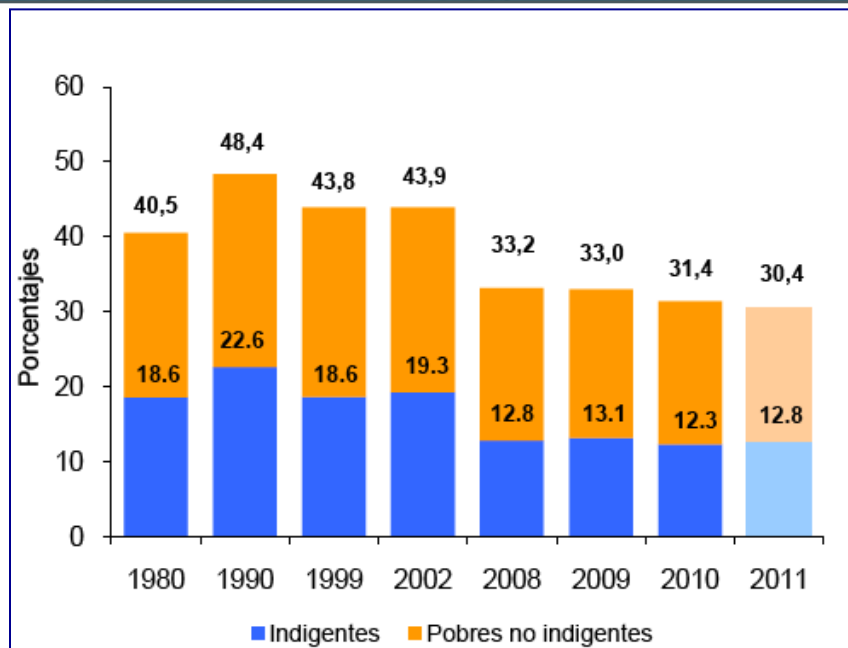


- USA: 49,601
- CANADA: 41,335
- GERMANY: 38,696
- SPAIN: 30,412



Latin America

POVERTY: A MAJOR CHALLENGE



Poverty and extreme poverty in LA 1980- 2011 (ECLAC)

2011

- 30.4% of the population lived under the line of poverty
- 12,8% under line of extreme poverty



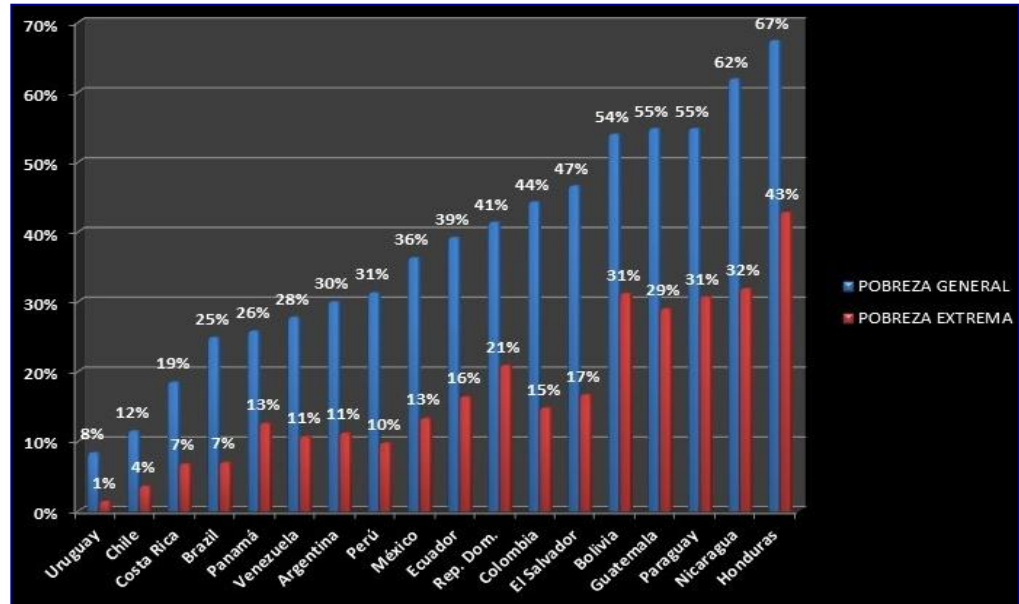
Latin America

POVERTY & EXTREME POVERTY BY COUNTRY

Range

•8 - 67% Poverty

•1 - 43% Extreme poverty



Poverty and extreme poverty in Latin American Countries (2012)



Latin America

CEPAL(ECLAC)

The most unequal region of the world

•Richest 10%: 48% of incomes

•Poorest 10%: 1,6% of incomes

(Developed countries: 29% - 2,5% respectively)



Healthcare in Latin America

Data





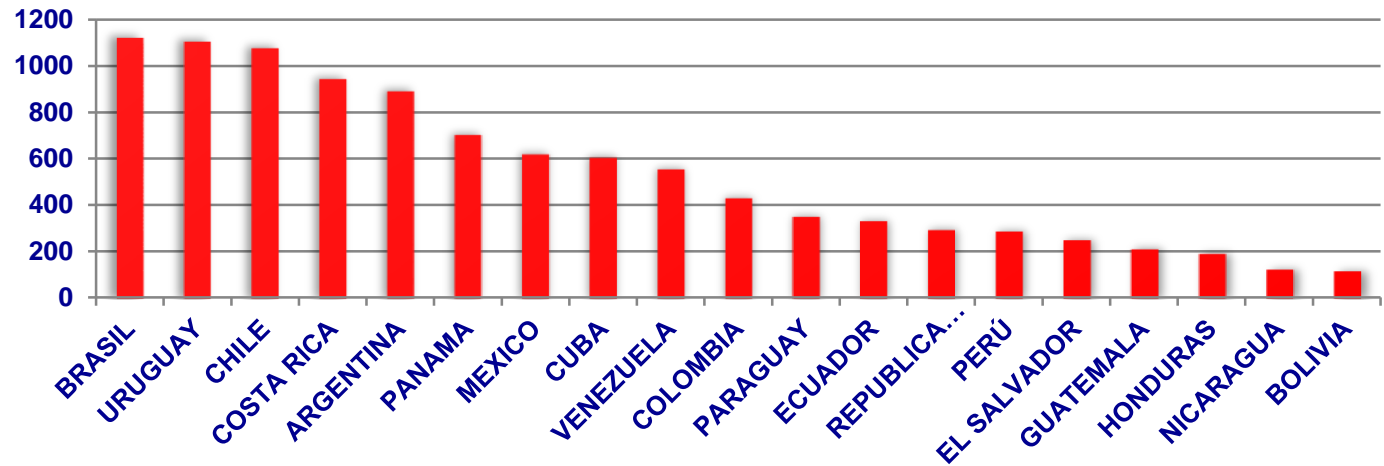
Latin America:

HEALTH EXPENDITURE PER CAPITA (US\$)

- RANGE: 97- 998
- MEDIA: 500
- AVERAGE: 490

- USA: 8,362
- CANADA: 5,222
- GERMANY: 4,688
- GREAT BRITAIN: 3,503
- SPAIN: 2,863

Health expenditure per capita 2011 (current US\$)





Latin America:

PHYSICIANS PER 1000 INHABITANTS BY COUNTRY

Range: 6 - 0,25

Media: 1,48

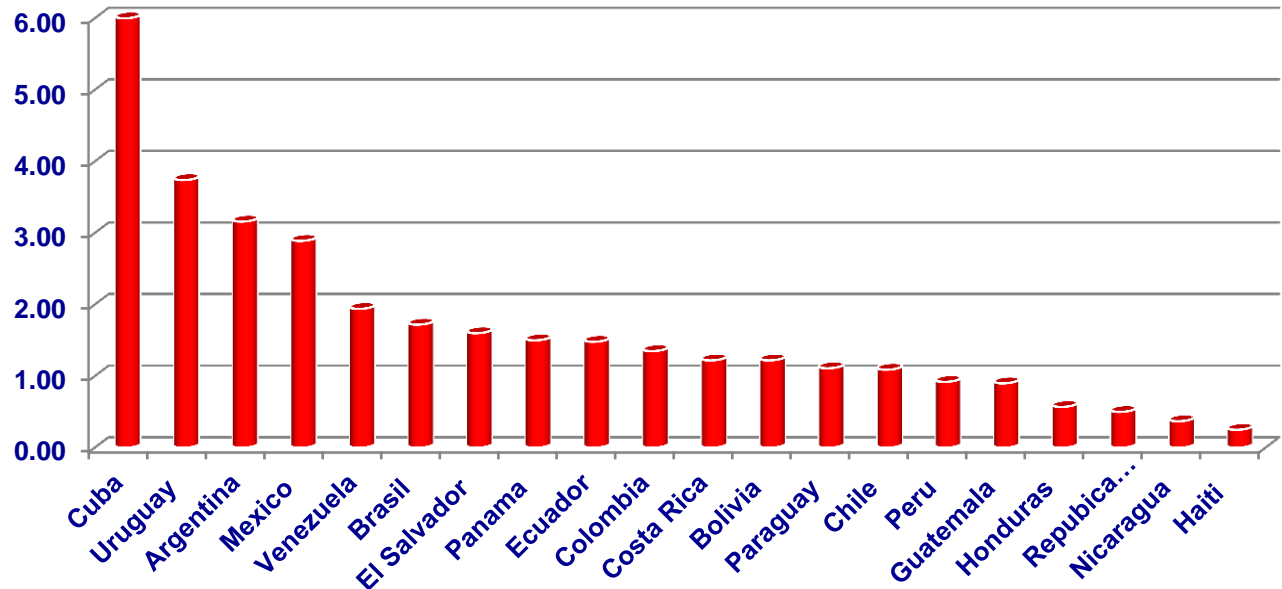
Average: 2,17

•WORLD: 1.4

•SPAIN: 3.71

•USA: 2.67

•CANADA: 1.91





Latin America: Radiology Practice

REFLECTION OF POLITICAL, ECONOMICAL, CULTURAL AND SOCIAL ISSUES

Great differences among countries

- Infrastructure / technology
- Human workforce
- Training programs
- Subspecialization
- Quality assurance programs
- Certification and MOC programs
- Radiation protection programs
- Research

Great variability within each country

- Urban vs. rural
- High vs. low income
- Private vs. public healthcare

Resources concentrated in large urban center



Latin America: Radiological Infrastructure / Technology

- In some countries there are centers in which radiology practice improves at the same pace as in countries of the developed world: state of the art technology, trained professionals and similar standards of practice
- In other countries, specially those with less income, improvements have been scarce and not well synchronized

Investment in advanced technology is not always coordinated with the availability of trained radiologists and technicians in order to maximize the efficiency of investment, and training is not formally considered with the purchase



Latin America: Radiology Practice

CIR 2012 - 2013:

Survey to improve knowledge regarding the reality of radiology in Latin American countries

18 Latin American countries members of the CIR participated (all LA countries except Paraguay)

- Incomplete response
- No exact numbers, just approximations



Latin America

RADIOLOGIST WORKFORCE

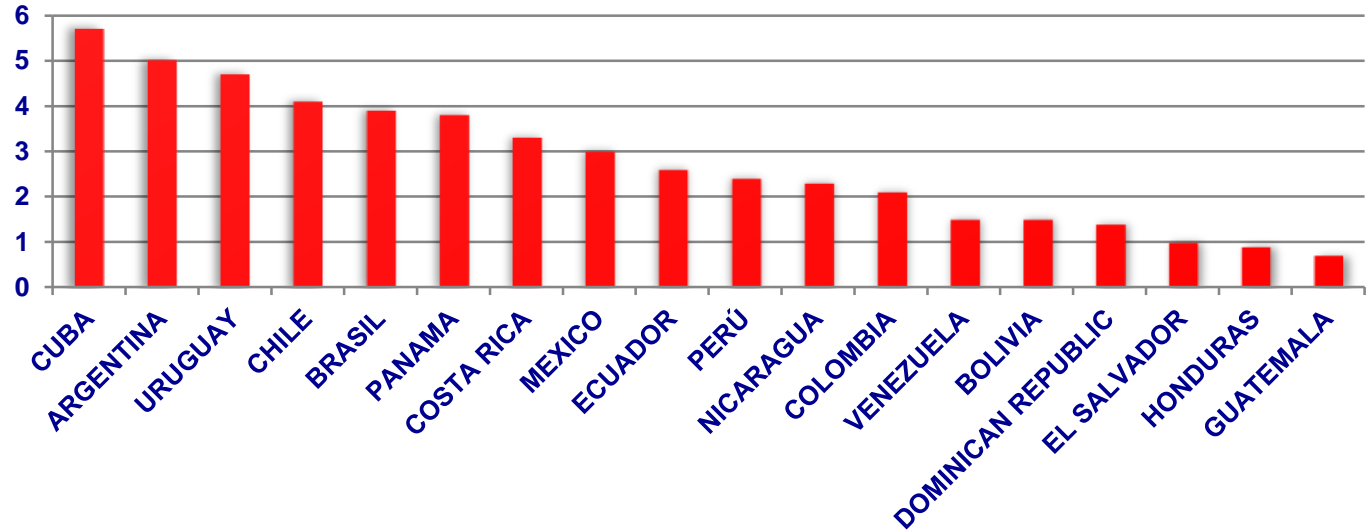
RANGE: 0,7 - 5,7

MEDIA: 2.45

EUROPE: 6

USA: 10

Radiologists / 100.000 Inhabitants

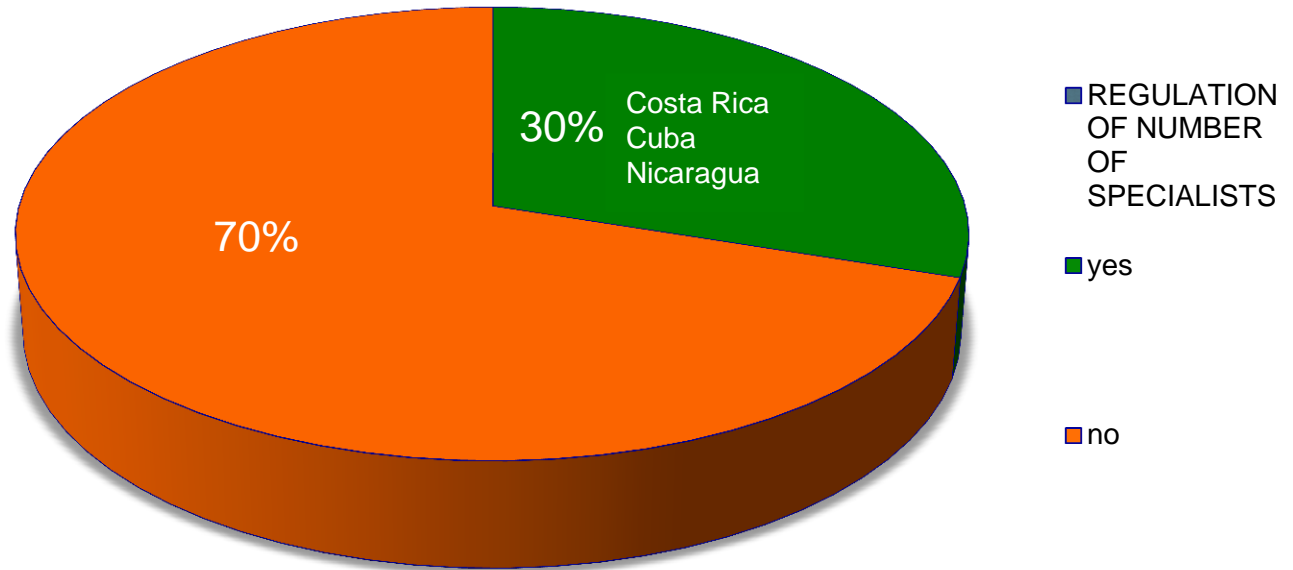


•SURVEY to 19 Latin American member Societies of the CIR (18 answers)



Latin America

REGULATION OF NUMBER OF SPECIALISTS



•SURVEY to 18 Latin American member Societies of the CIR (10 answers)



Latin America

GENERAL RADIOLOGY VS. SUB SPECIALISTS

General Radiology is the most frequent practice; few centers organized by subspecialties)

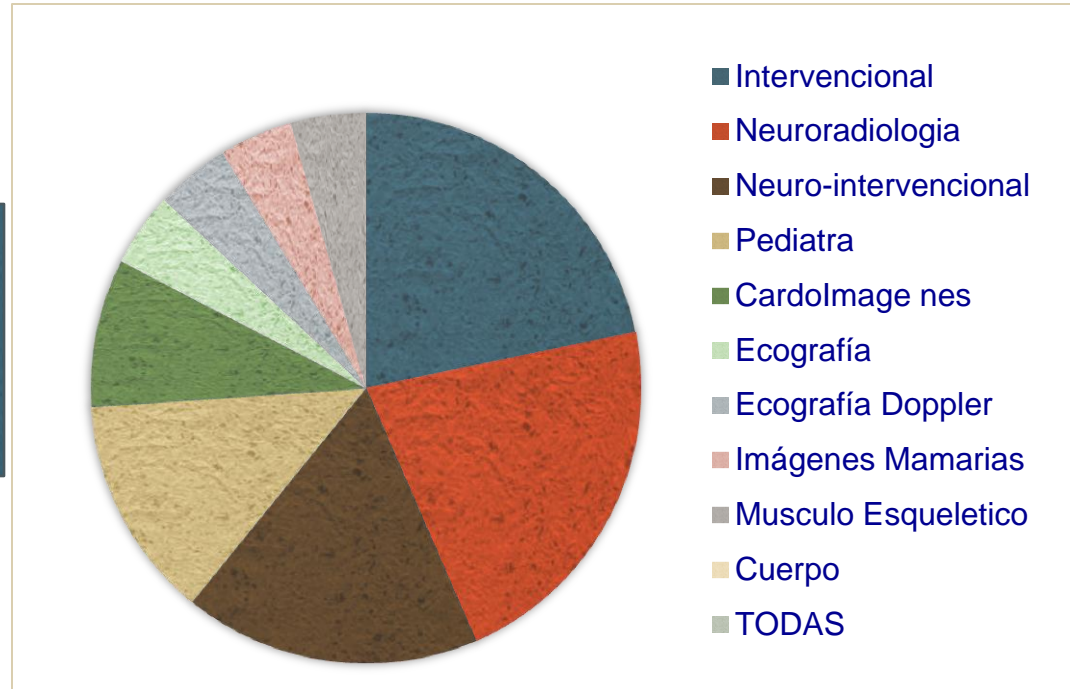
- Lack of radiologists (every body has to do everything)
- Few subspecialty programs
- No legal recognition of subspecialties (no stimulus)



Latin America: Subspecialists

SUB SPECIALISTS WORKFORCE

Sub specialties in shortage: ALL
Sub specialties in more need



•SURVEY to 18 Latin American member Societies of the CIR (8 answers)

Latin America: Radiology Practice

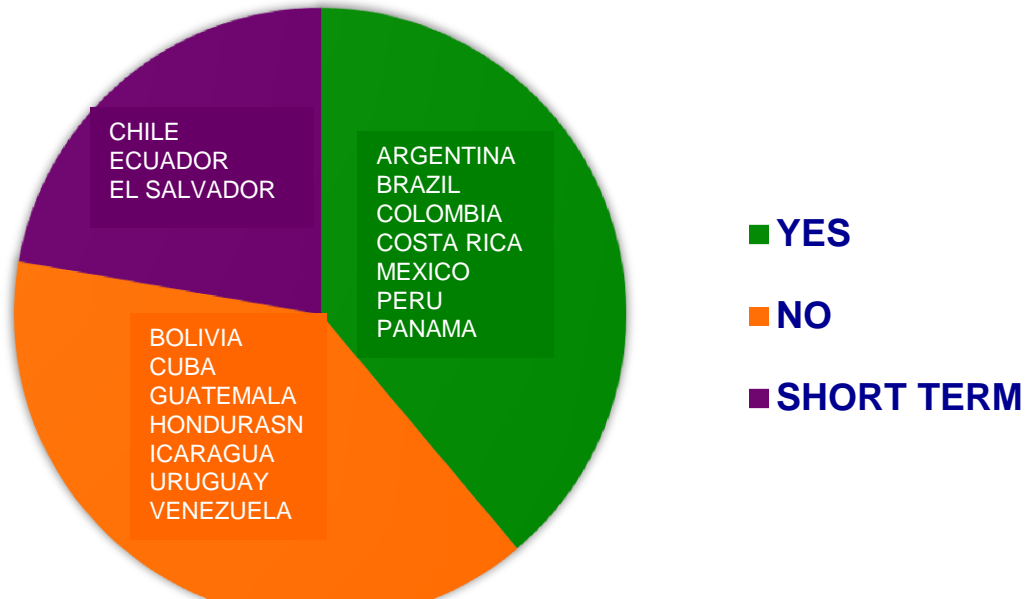
PUBLIC VS. PRIVATE

- In most countries the majority of radiologists work both in private and public practice.
- Public salaries are significantly lower than in private practice and usually insufficient as only salary
- Cuba is the only country with no private practice



Latin America

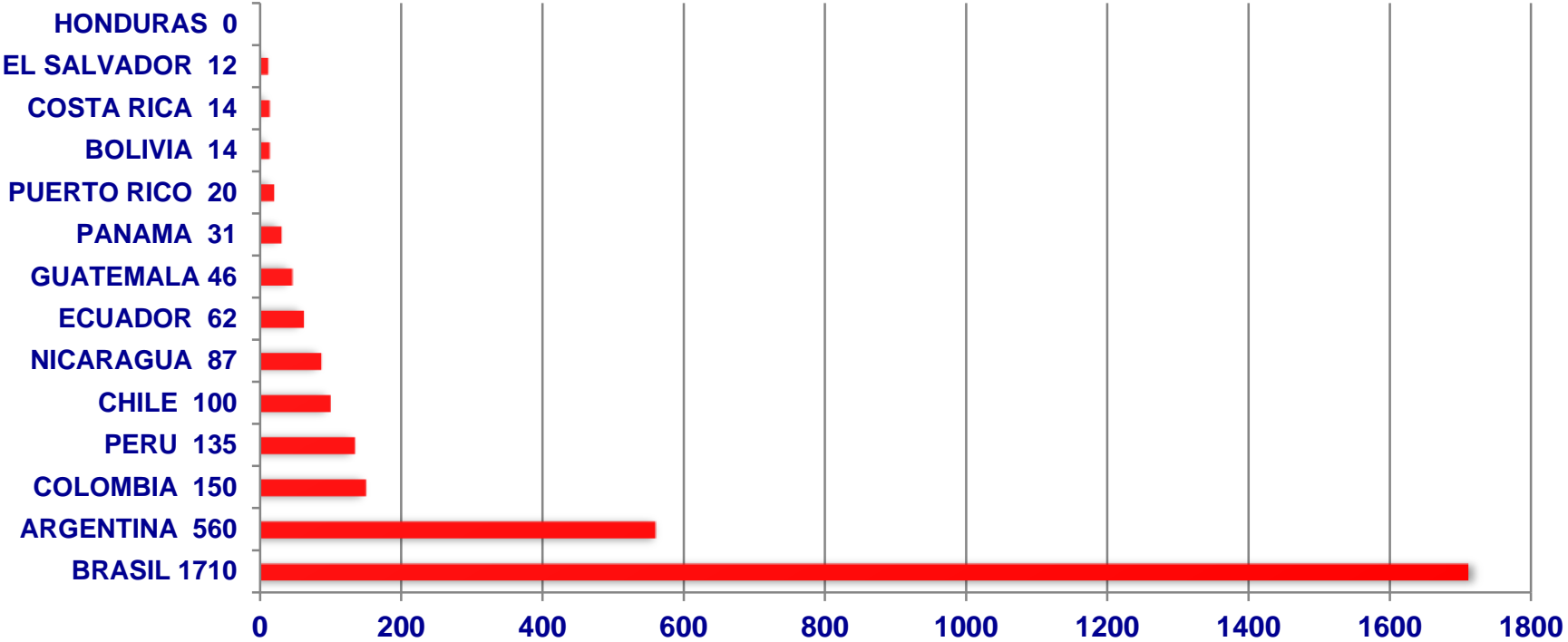
MOC PROGRAMS FOR RADIOLOGISTS





Latin America: Education in Radiology

RESIDENTS PER COUNTRY

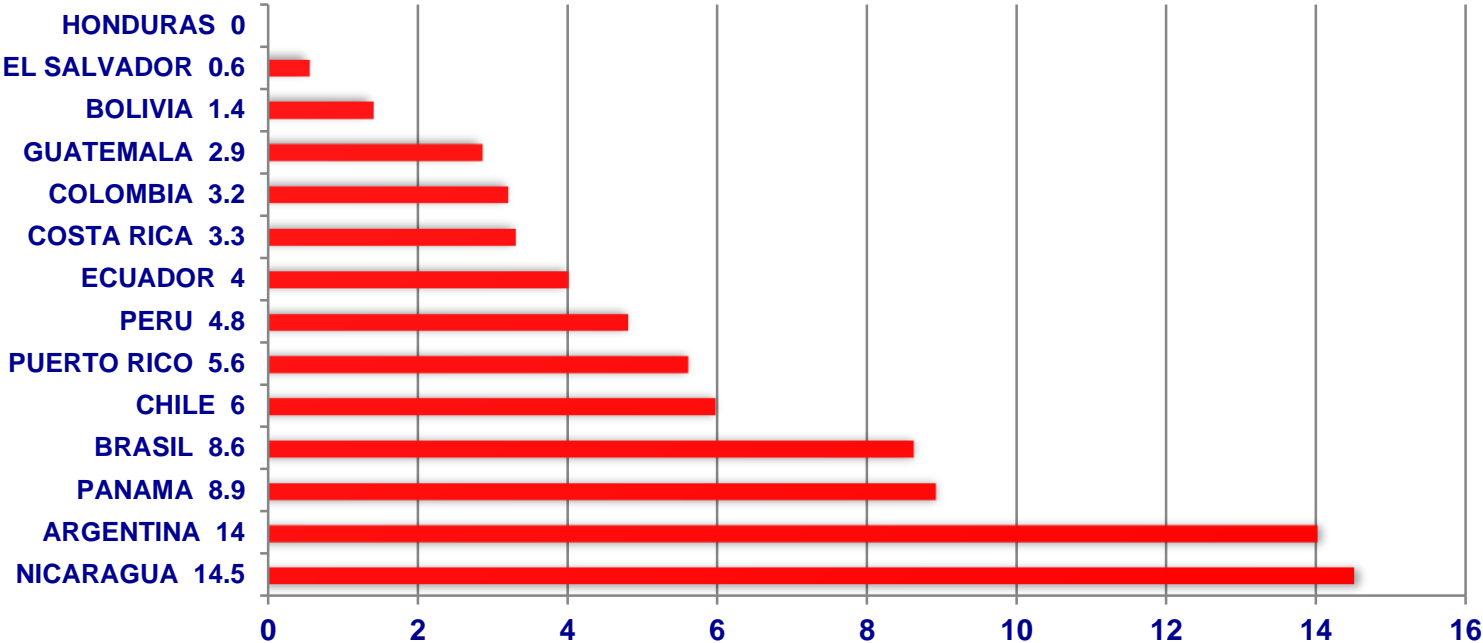


•2013 SURVEY to 18 Latin American member Societies of the CIR (14 answers)



Latin America: Training in Radiology

RESIDENTS / M INHABITANTS

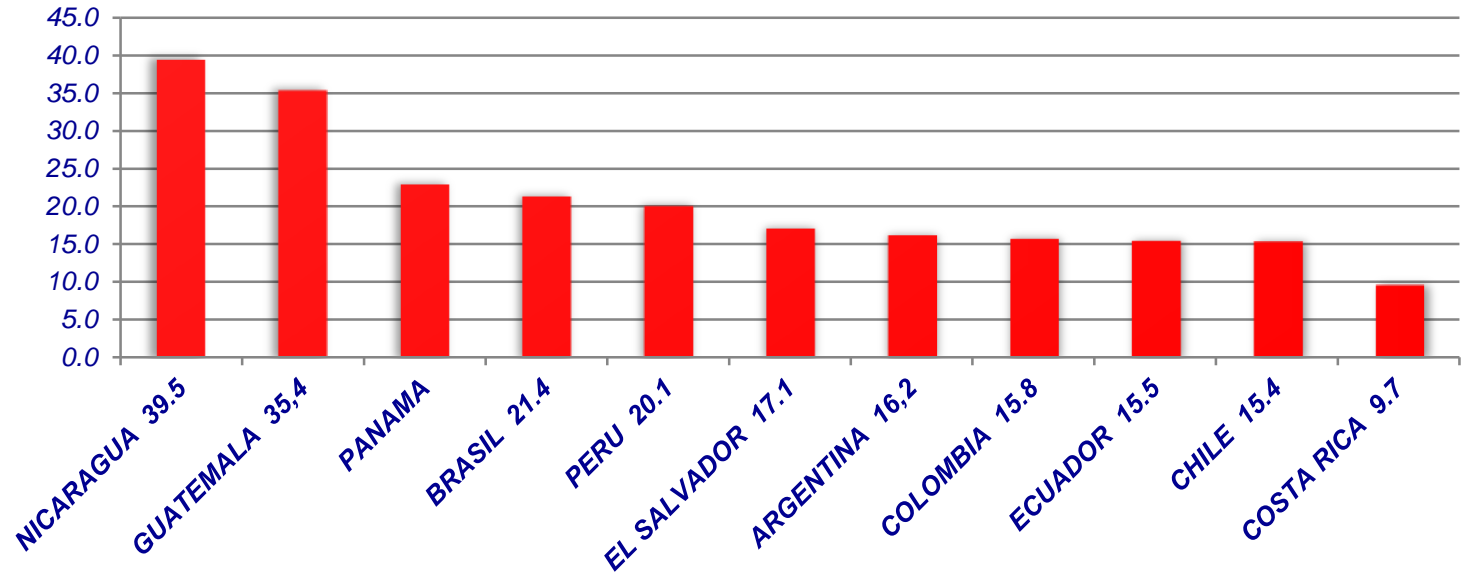


•2013 SURVEY to 18 Latin American member Societies of the CIR (14 answers)



Latin America: Training in Radiology

RESIDENTS / ACTIVE RADIOLOGISTS (%)

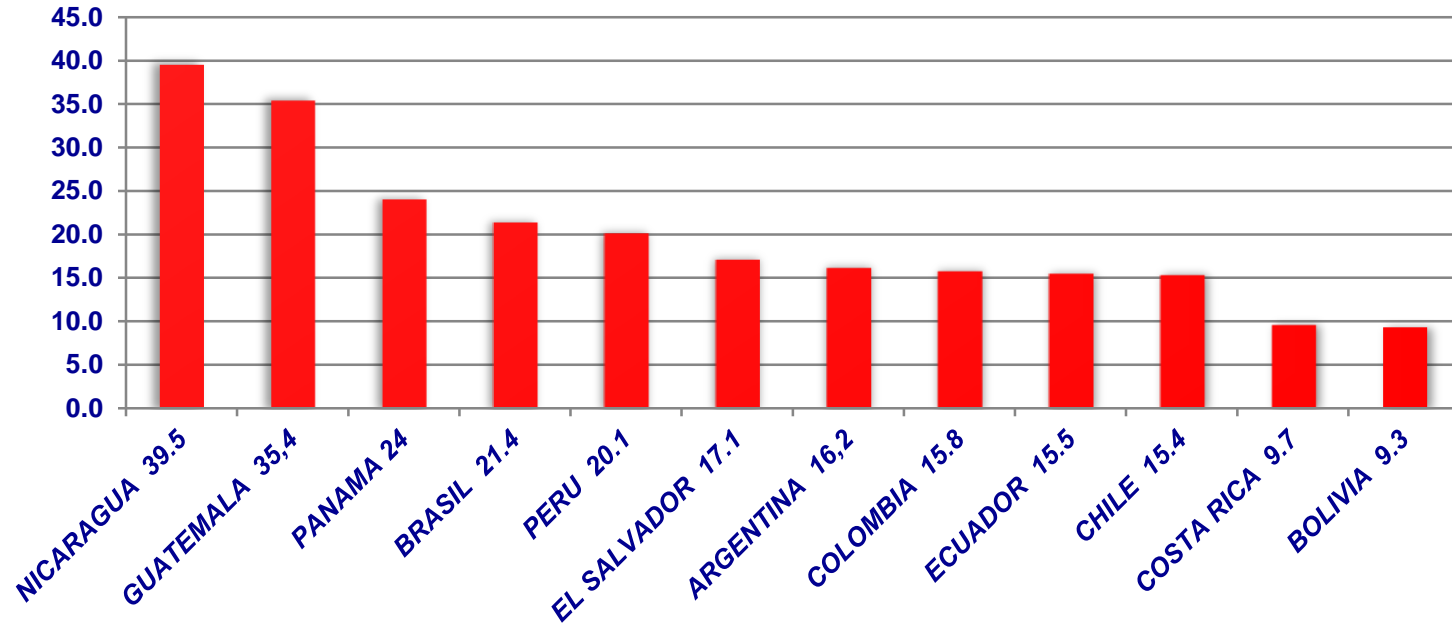


•2013 SURVEY to 18 Latin American member Societies of the CIR (12 answers)



Latin America: Training in Radiology

RESIDENTS / ACTIVE RADIOLOGISTS (%)

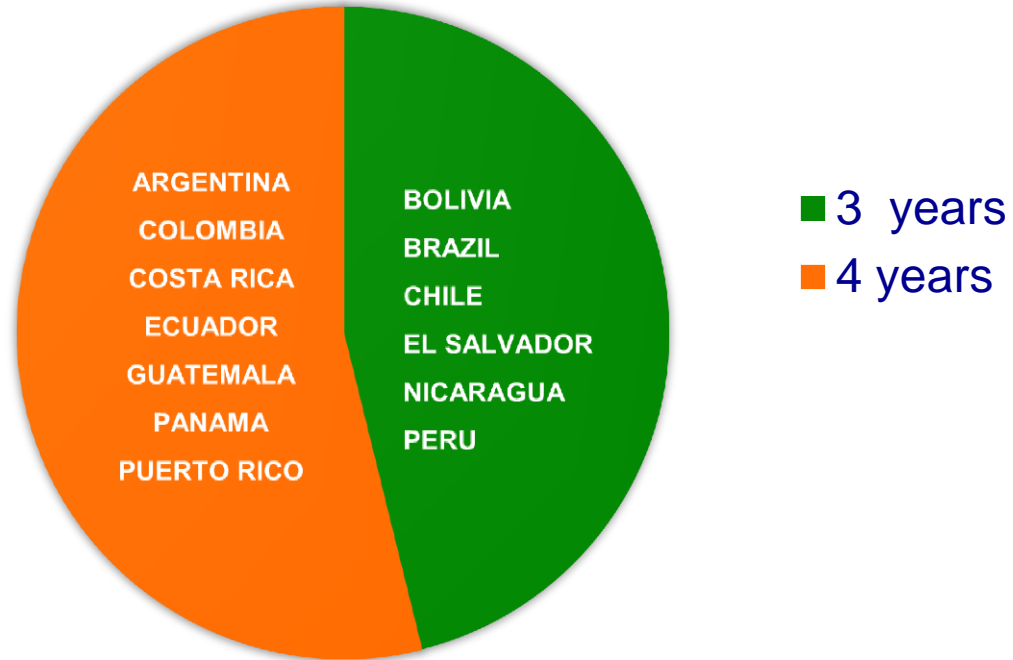


•2013 SURVEY to 18 Latin American member Societies of the CIR (12 answers)



Latin America: Training in Radiology

DURATION OF RESIDENCE PROGRAMS



•2013 SURVEY to 18 Latin American member Societies of the CIR (13 answers)



Latin America: Training in Radiology

SUBSPECIALTY FELLOWSHIPS

5 COUNTRIES

- ARGENTINA
- BRAZIL
- CHILE
- COLOMBIA
- MEXICO

**ECUADOR will start
a Neuroimaging
program**

1 - 2 years

No legal recognition

Universities and private centers

Non regulated programs (except

Brazil accreditation by the CBR).



Radiology in Latin America

This is the reality we face...

Great inhomogeneity among countries: many have important deficits

Global shortage of radiologists

Deficit of sub specialization



Radiology in Latin America

This is the reality we face...

Need of standardization and accreditation of educational programs

Lack of maintenance of certification programs

Need to harmonize standards of processes related to a safe radiological practice



Latin America: Education in Radiology

Strategies to correct these deficits depend on governments and national educational & healthcare institutions...participation of scientific societies is variable within the region

To be included as experts in the development of efficient strategies National Radiological Societies have to be strong, representative and respected organizations



Latin America: Education in Radiology

The Inter American College of Radiology acts through and for the national radiological societies; its main role is to improve and harmonize regional radiological practice

Improve the quality of radiological training

Deliver high quality education (focused in most needed regions)

Facilitate and promote radiological subspecialization

Define & recommend standards of practice for a safe radiological practice



Latin America: Education in Radiology

Conjoined work with organizations that share our objectives is not only desirable but also necessary to achieve success

THANKS
MUCHAS GRACIAS