

# AGING & HEALTH IN AMERICAS

## CHALLENGES & OPPORTUNITIES

Dr. Enrique Vega  
Regional Advisor in Aging and Health  
PAHO/WHO

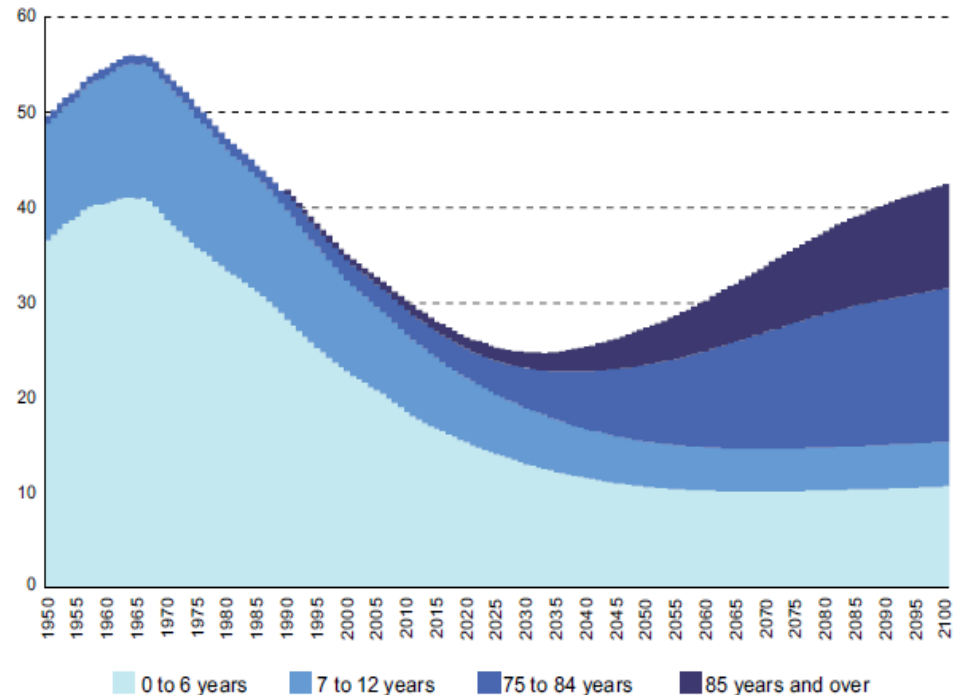
[vegaenri@paho.org](mailto:vegaenri@paho.org)

# AGING IN LATIN AMERICA AND THE CARIBBEAN

- In 2006, just over 50 million of Latin America's and Caribbean population was 60 or older, in less than 20 years the amount will be more than 100 million. In 2050, 24% of the population—some 200 million people—will be older adults
- The Caribbean is the oldest region in LAC.

LATIN AMERICA AND THE CARIBBEAN: CARE DEPENDENCY RATIO BY AGE GROUP, 1950-2100

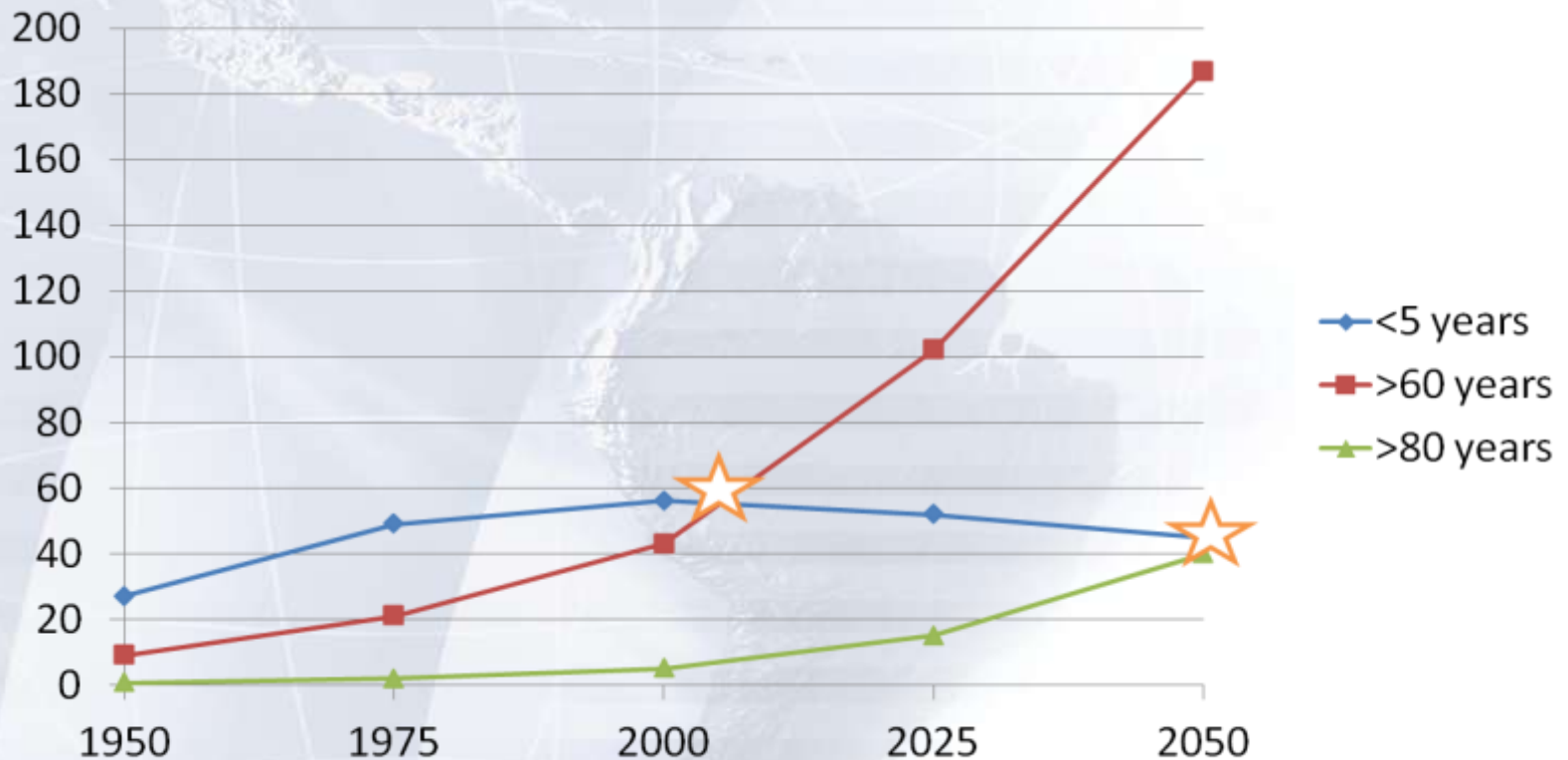
(Number of persons of care-receiving age for every 100 persons aged 15 to 74 years)



Source: Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC, on the basis of United Nations, Department of Economic and Social Affairs (DESA), *World Population Prospects: The 2010 Revision* [CD-ROM].

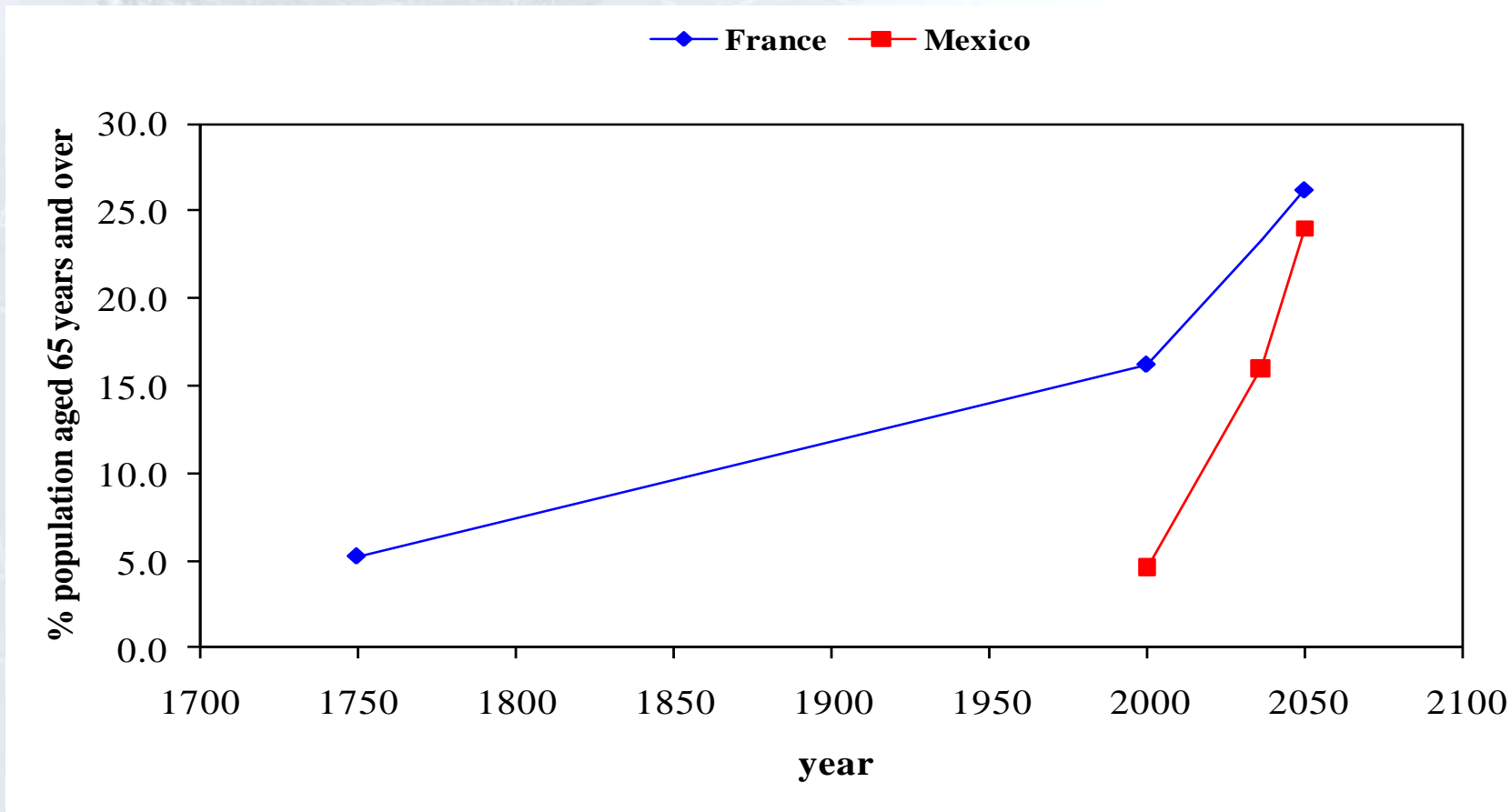
# Aging in Latin America and the Caribbean: Aging Population IS NOW

Population in  
Millions

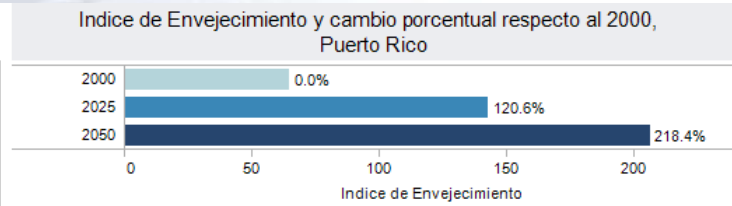
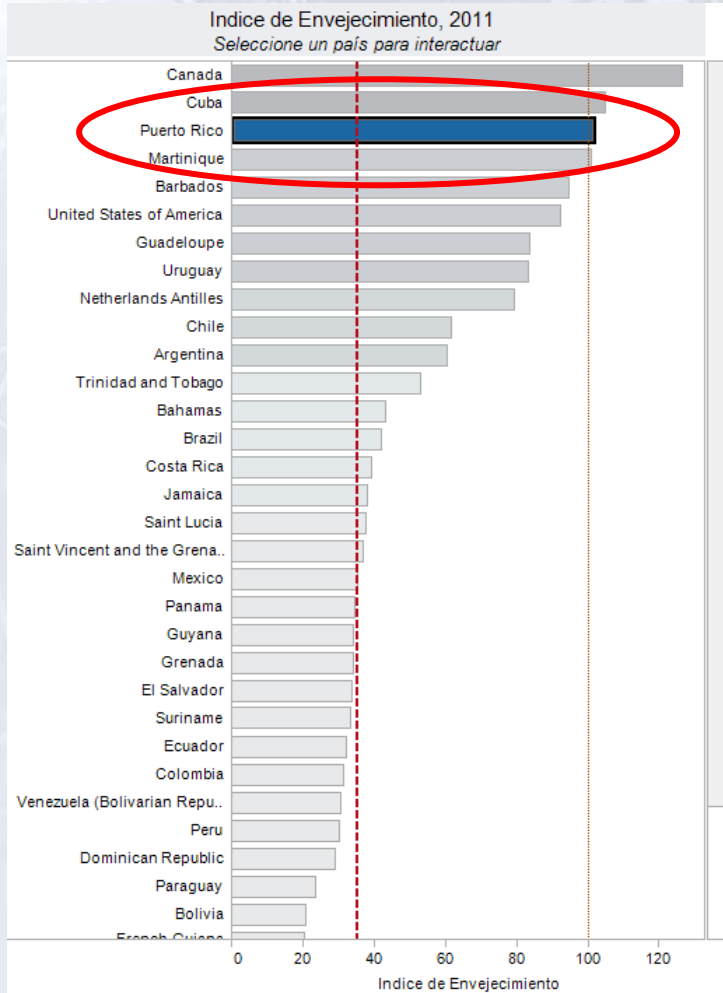


# Aging in Latin America and the Caribbean

## FAST PROCESS

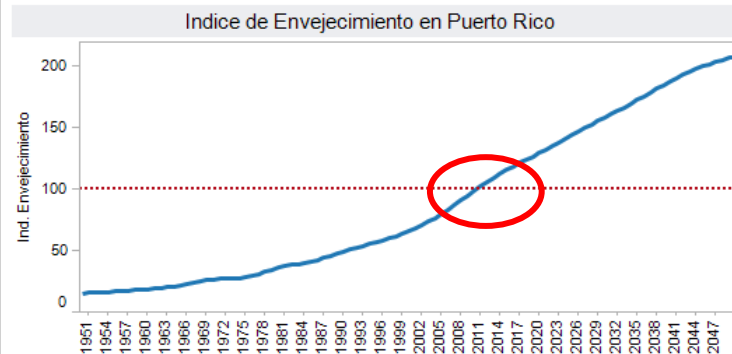


# Aging Index: Puerto Rico 2011



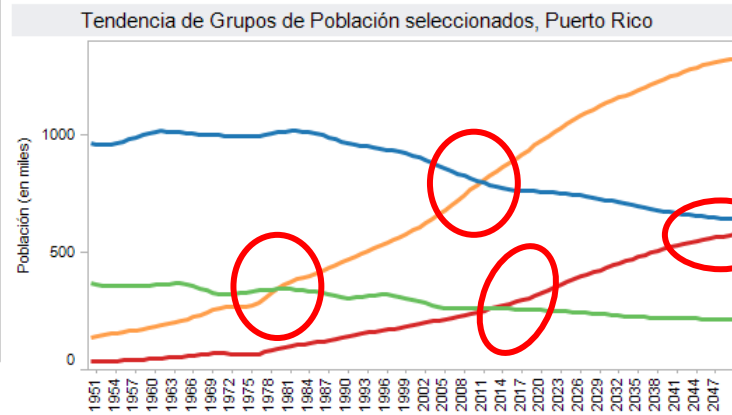
Año (a 1 Julio)  
2011

Intervalos  
Indice de Envejecimiento  
15.8 126.4



**Americas, 2011**

|                  |         |
|------------------|---------|
| Pob_60+          | 127,553 |
| Pob_75+          | 38,670  |
| Prop Pob 60+     | 13.4    |
| Razon 60+ vs <15 | 0.55    |
| Razon 75+ vs <5  | 0.51    |



**Puerto Rico, 2011**

|                  |       |
|------------------|-------|
| 0-4              | 256.4 |
| Pob<15           | 790.8 |
| Pob_60+          | 802.1 |
| Pob_75+          | 248.6 |
| Prop Pob 60+     | 20.0  |
| Razon 60+ vs <15 | 1.01  |
| Razon 75+ vs <5  | 0.97  |

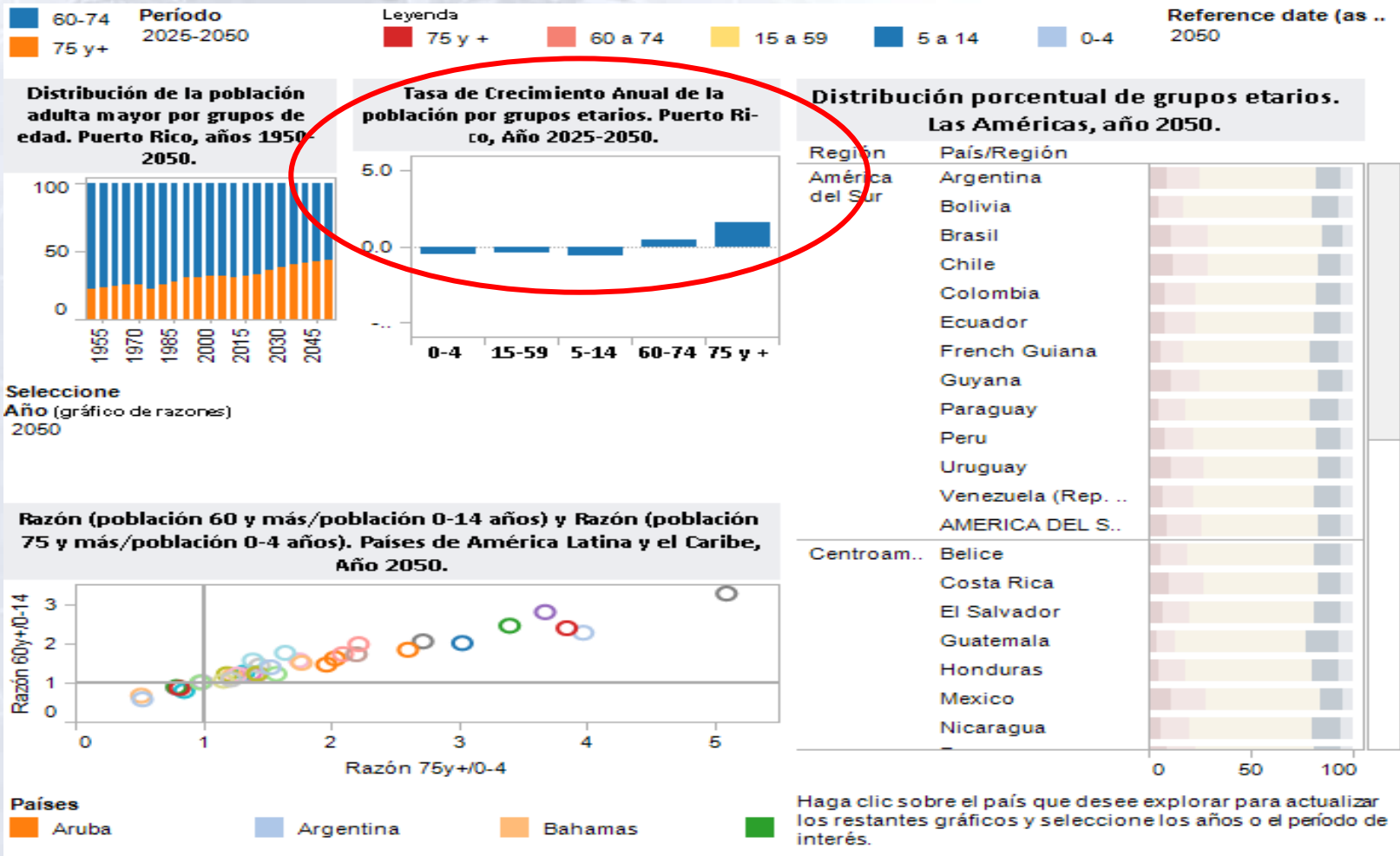
Grupos de población

- 0-4
- Pop\_0\_15
- Pob\_60+
- Pob\_75+

Fuente: World Population Prospects 2008, UNPD  
 Autor: Ramon Martinez, martiner@paho.org PAHO



# The more important increase, in the oldest old





# THE POPULATION AGING SOCIAL & PUBLIC HEALTH RESULT

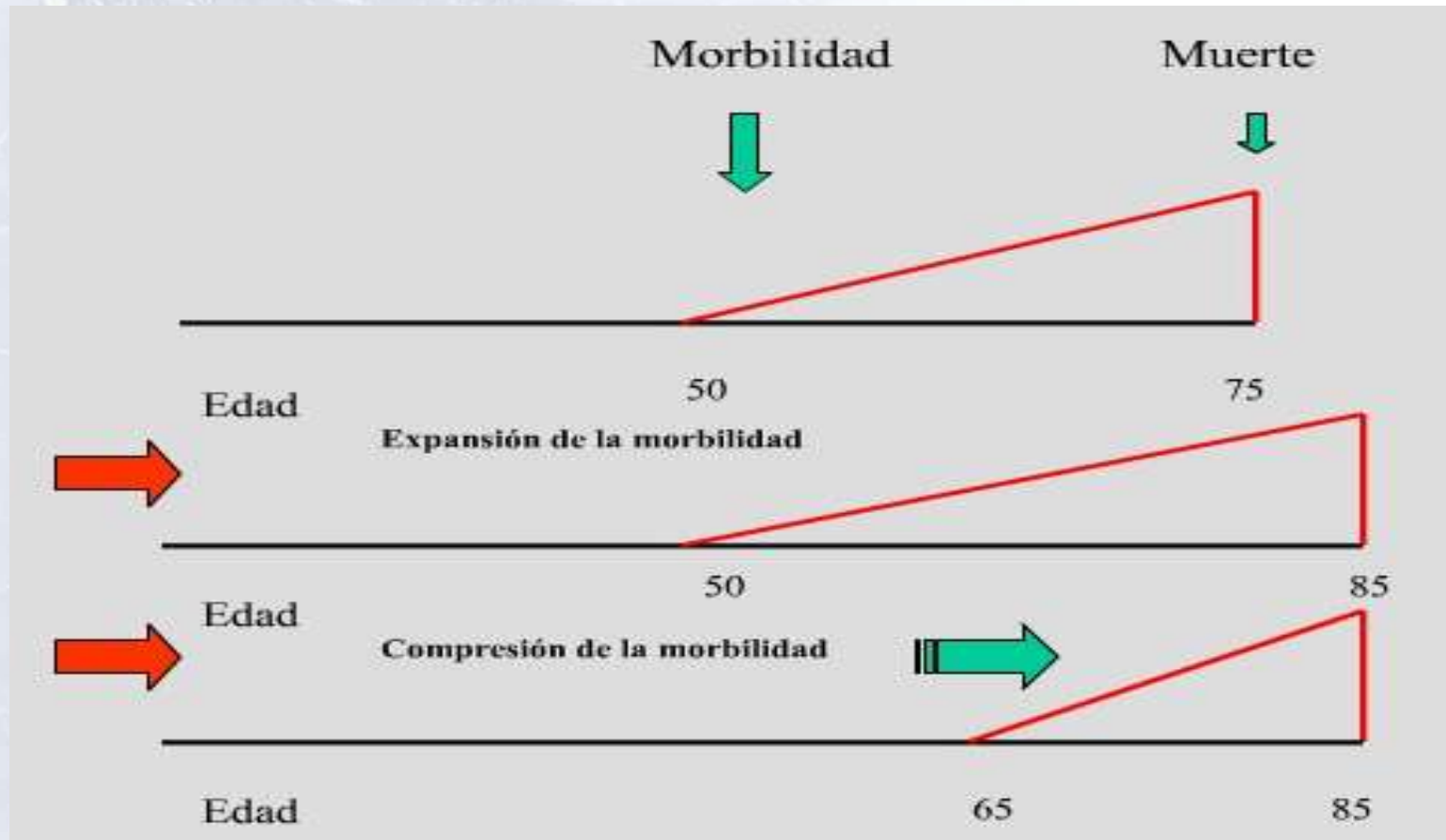
# THE REAL CHALLENGE IS NOT AGING



# ***SOCIAL DETERMINANTS OF HEALTH***

- Around 50% of those surveyed in the SABE study said that they did not have sufficient resources to meet their daily needs
- 33% of the elderly in urban areas and 50% in rural areas live in poverty. One-third of persons 65 or older do not have retirement benefits, pensions, or gainful employment
- Older adults have levels of schooling lower than the rest of the population, with very high levels of illiteracy that reach 80% in rural areas in some countries

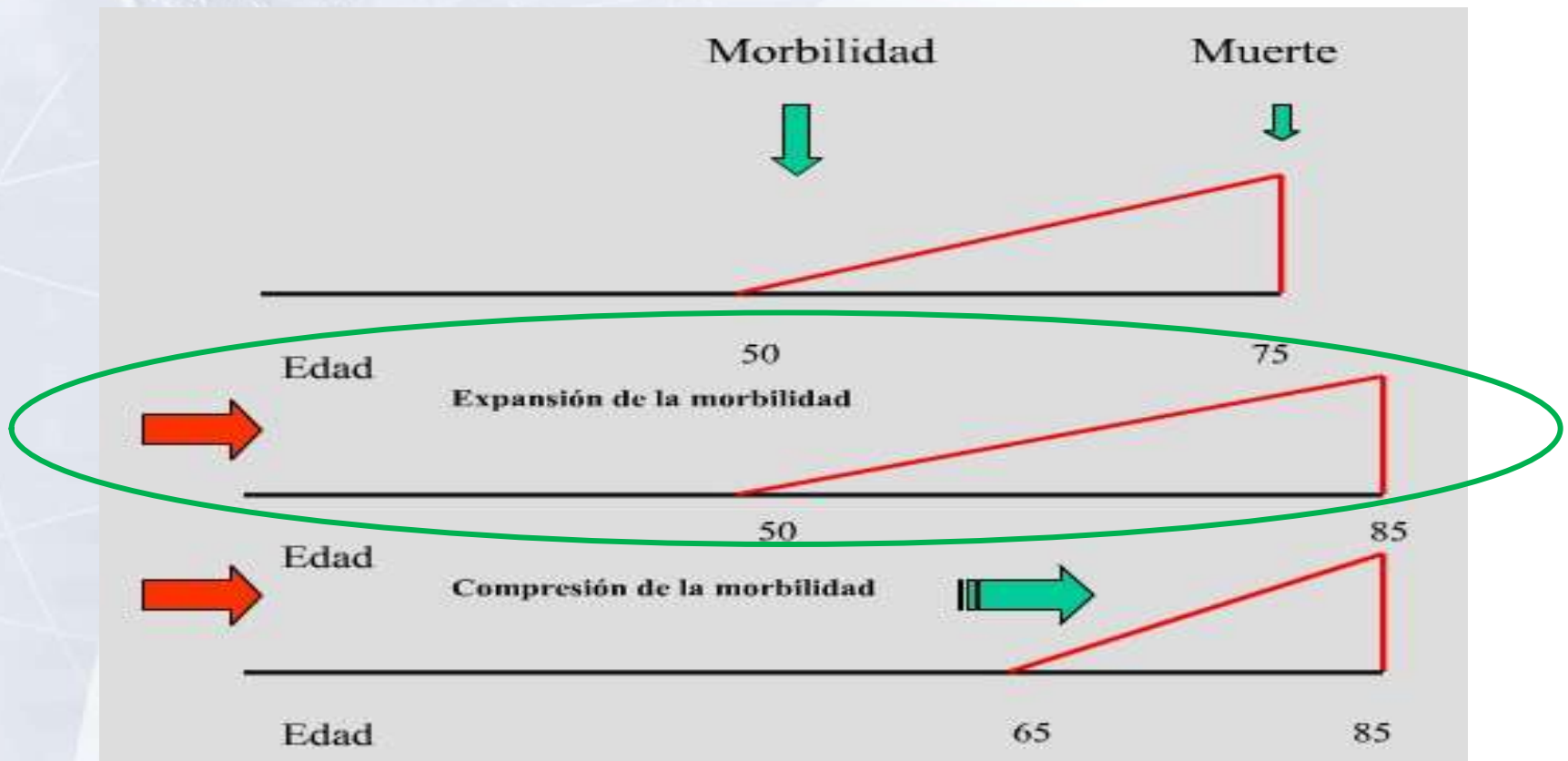
# ESPECTANCY OF LIFE & MORBILITY EXPECTED SCENARIOS



JF Fries Aging, natural death, and the compression of morbidity.  
*NEJM* 1980, Volume 303:130-135.

**How healthy we will live?**  
**The reality: Today, we grow old**  
**without health**

# ESPECTANCY OF LIFE & MORBILITY EXPECTED SCENARIOS



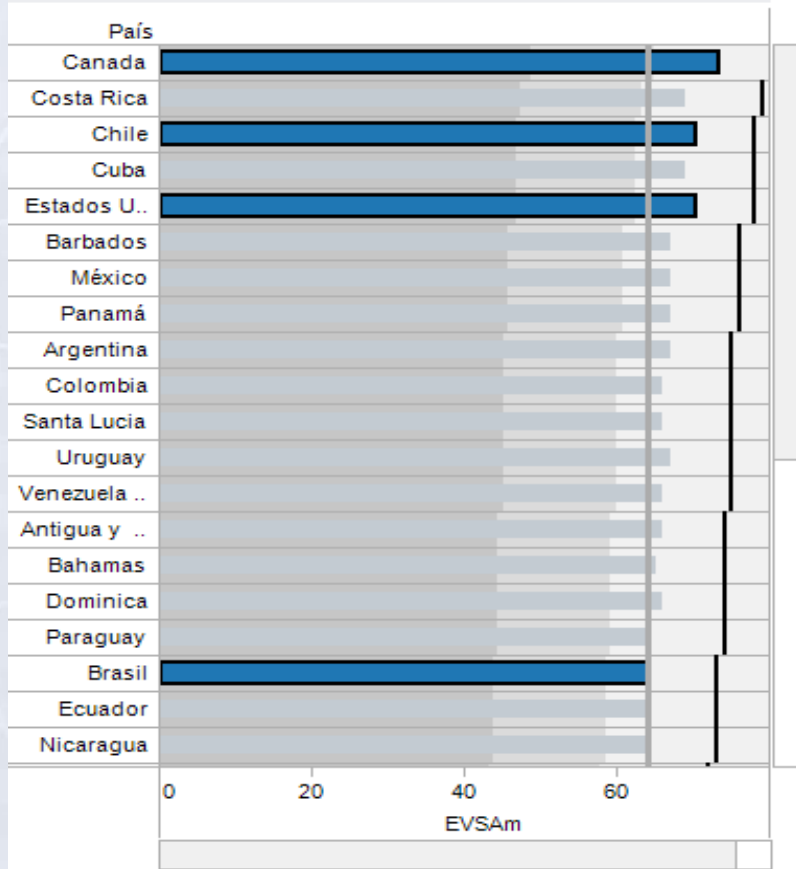
JF Fries Aging, natural death, and the compression of morbidity.  
*NEJM* 1980, Volume 303:130-135.

- In the United States only 22.7 percent of people over 65 and only 32.2 percent of those 75 and older, report having fair or poor health
- In Latin America the majority report having fair or poor health: 58% of women and 51% of men
- In Latin America women reported worse health and poor health status

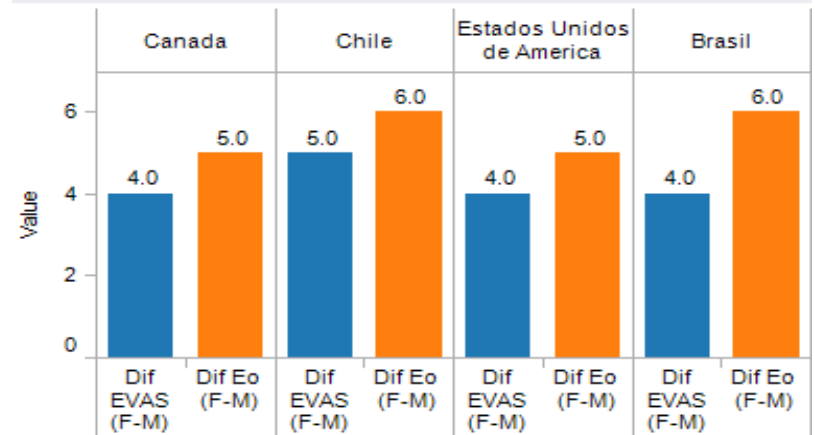


# THE LIFE EXPECTANCY WITHOUT HEATH

Esperanza de vida (Eo) y Esperanza de vida saludable (EVAS) por país. Año 2007.  
(haga clic en un país para interactuar)  
(pulsando la tecla Ctrl puede seleccionar más de un país)

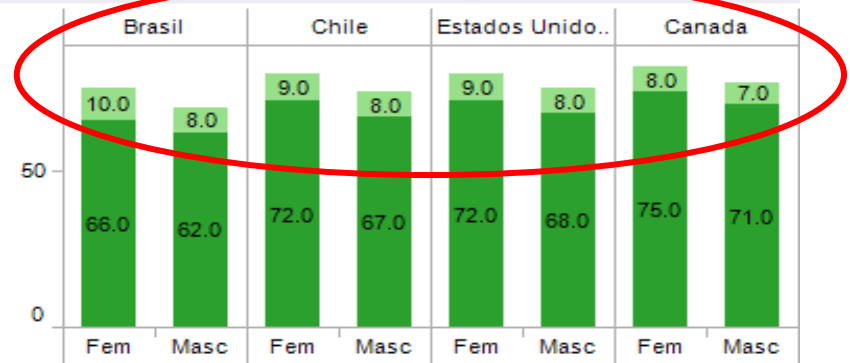


Diferencial entre sexos en la Eo y EVAS. Año 2007.



■ Años con mala salud  
■ Esperanza de vida saludable

EVAS y años con mala salud según sexo. año 2007

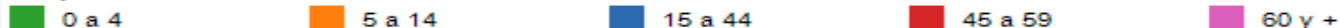


tableau

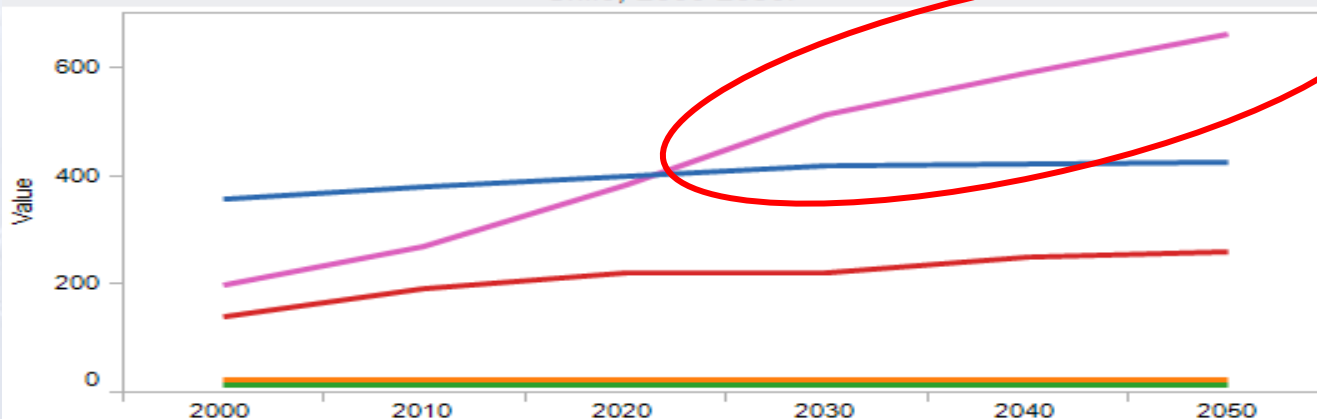


# THE DISABILITY BURDEN

## Grupos de edad



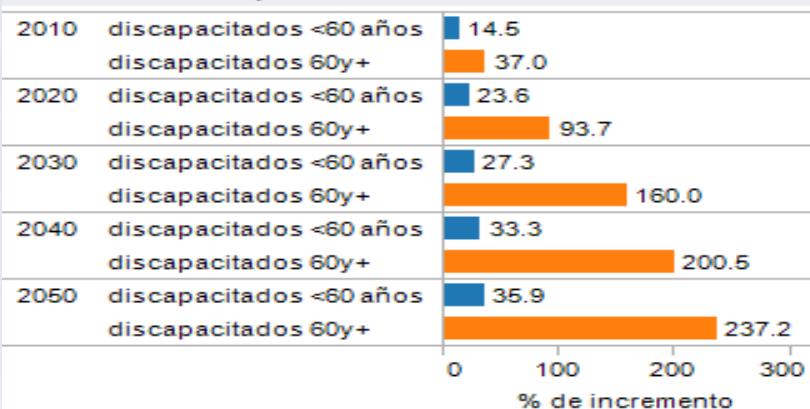
Proyección del número de discapacitados severos según grupos de edad. Chile, 2000-2050.



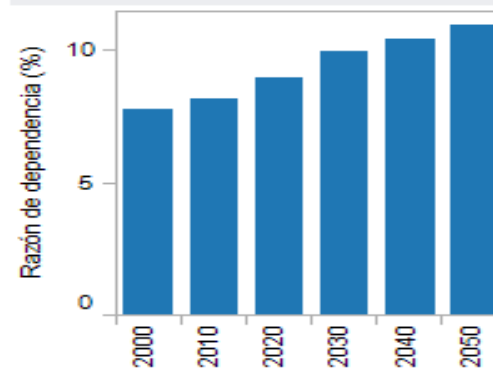
## País

- Argentina
- Bahamas
- Barbados
- Belize
- Bolivia
- Brazil
- Chile
- Colombia
- Costa Rica
- Cuba
- Dominican Republic
- Ecuador
- El Salvador
- French Guiana
- Guadeloupe
- Guatemala
- Guyana
- Haiti
- Honduras
- Jamaica
- Martinique
- Mexico
- Netherlands Antilles
- Nicaragua
- Panama
- Paraguay
- Peru
- Puerto Rico
- Saint Lucia
- Suriname
- Trinidad and Tobago
- Uruguay

Cambio relativo de la prevalencia de discapacitados respecto al año 2000. Chile.



Razón de dependencia % (discapacitados severos/población 15-60 años). Chile, proyecciones 2000-2050.

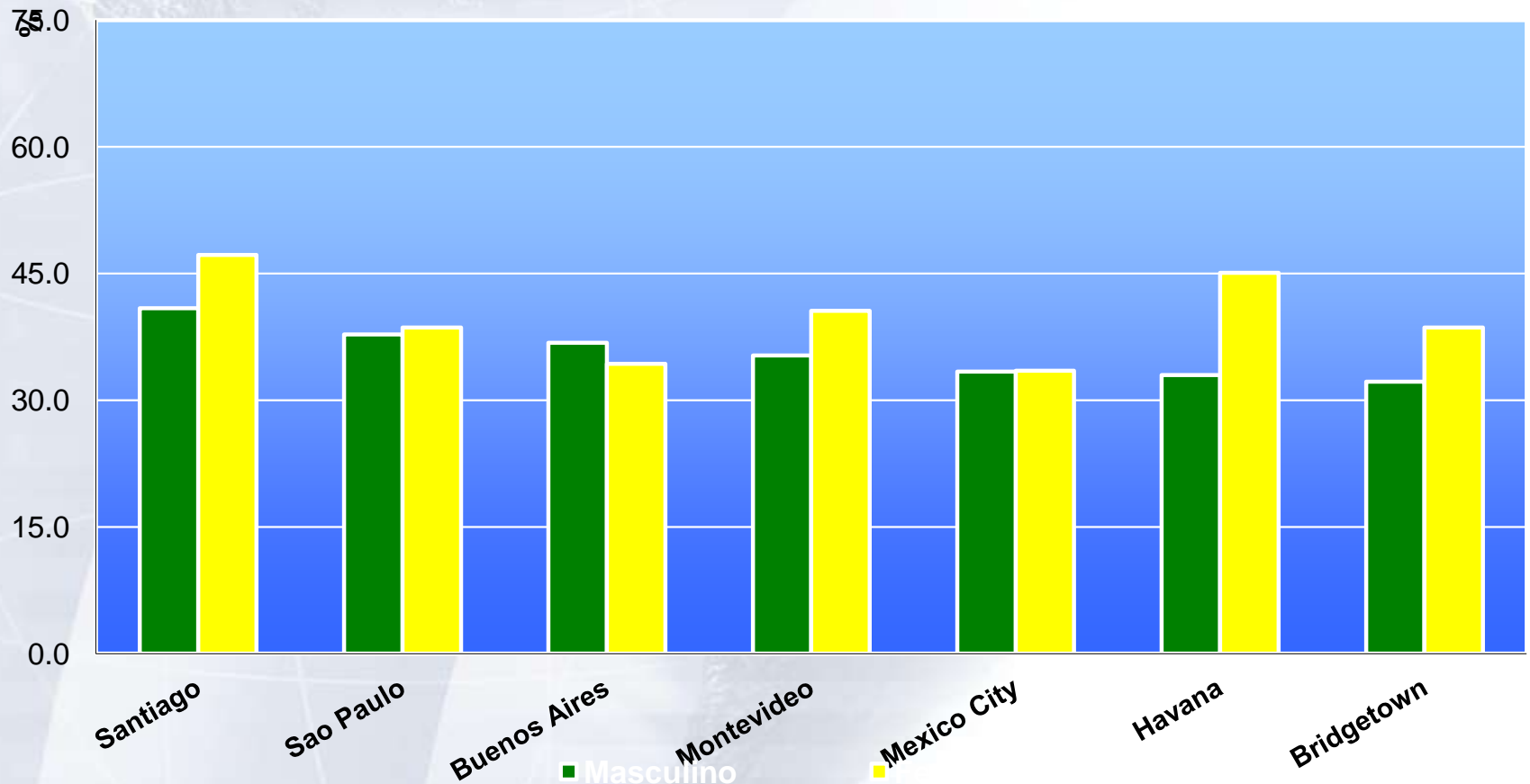


# PREVALENCE OF SOME CHRONIC DISEASES IN OLDER PERSONS

|                   | D         | H         | A         | HD        | PD       |
|-------------------|-----------|-----------|-----------|-----------|----------|
| <b>Bridgetown</b> | <b>22</b> | <b>48</b> | <b>47</b> | <b>12</b> | <b>4</b> |
| B. Aires          | 12        | 49        | 53        | 20        | 8        |
| La Habana         | 15        | 44        | 56        | 24        | 13       |
| México            | 22        | 43        | 24        | 10        | 10       |
| Montevideo        | 14        | 45        | 48        | 24        | 9        |
| Santiago          | 13        | 52        | 32        | 34        | 13       |
| Sao Paulo         | 17        | 53        | 32        | 20        | 13       |

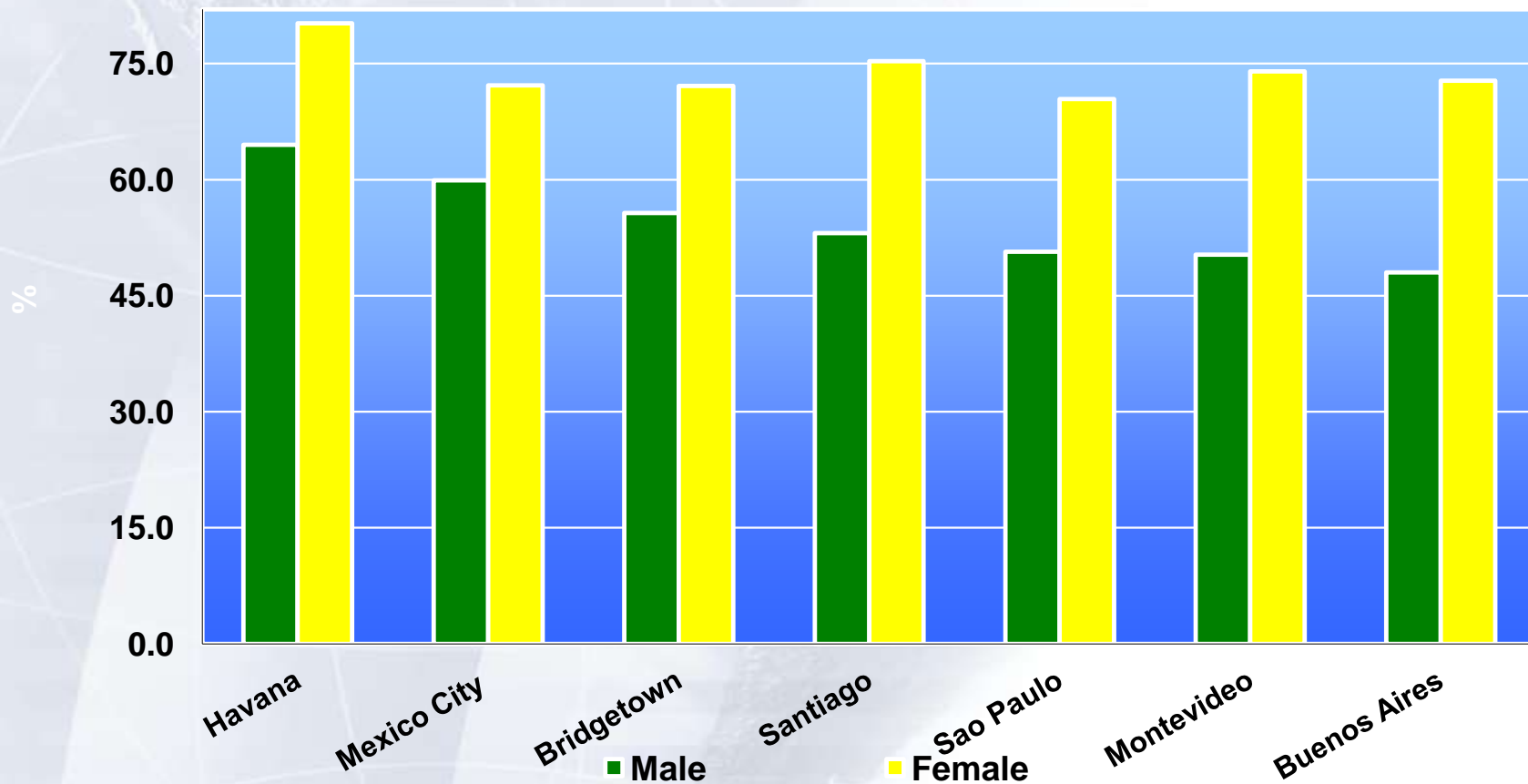
**D: Diabetes    A: Artritis    PD: Pulmonary Disease    HD: Heart Disease**  
**H: Hipertensión**

# Seniors with at least one treatable chronic condition

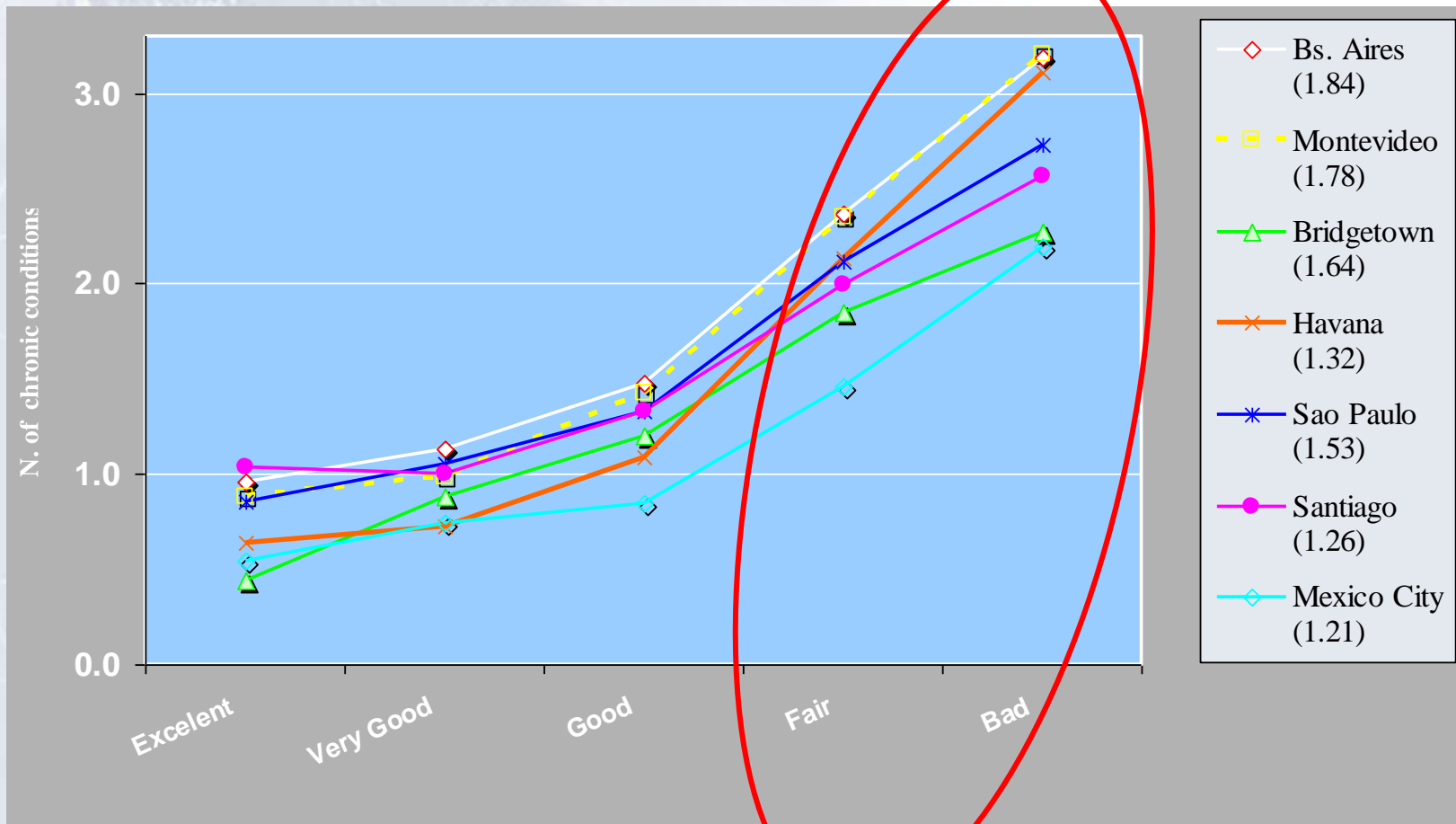


Source: SABE/2000 – PAHO

# Seniors with the report of at least one disabling conditions



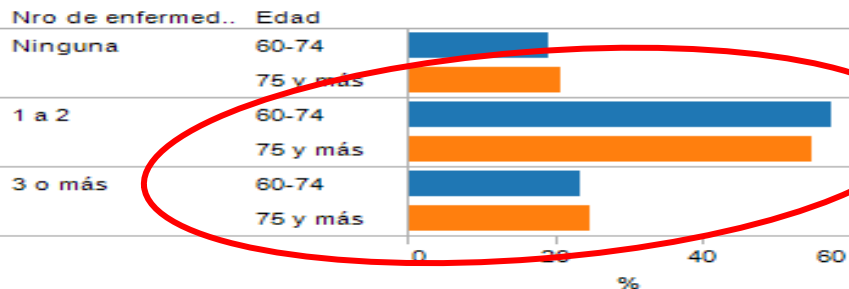
# HEALTH SELF REPORT AND CHRONIC CONDITIONS IN SENNIORS



# Chronic Disease and functional status in Seniors. Havana, Cuba 2000

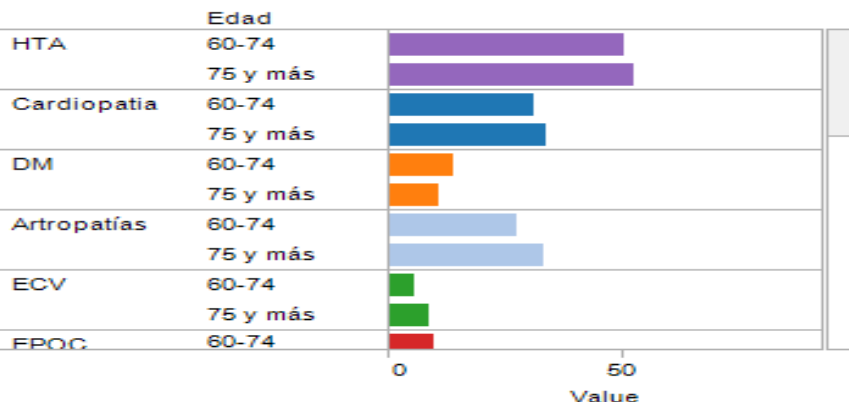
Pais  
Cuba

Adultos mayores según número de enfermedades y edad. Cuba. Estudio SABE, 2000.

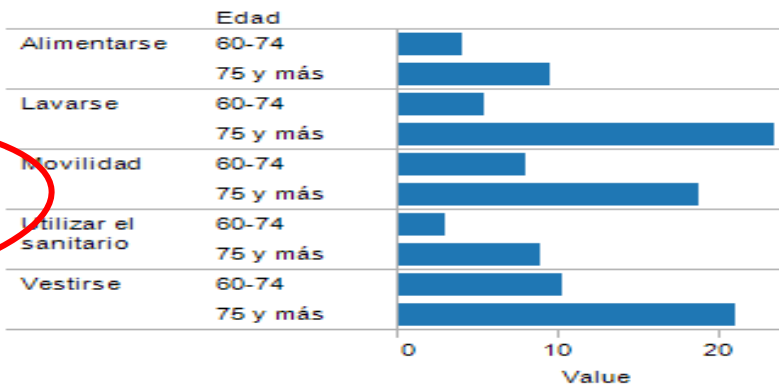


(Haga clic sobre el gráfico para actualizar los restantes).

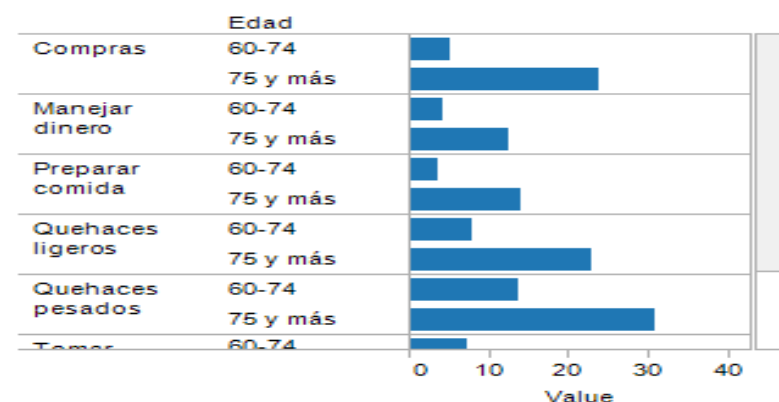
Prevalencia de algunas enfermedades crónicas y problemas geriátricos según grupos de edad. Chile. Estudio SABE, 2000.



Adultos mayores según edad y limitación en algunas actividades básicas de la vida diaria. Chile.



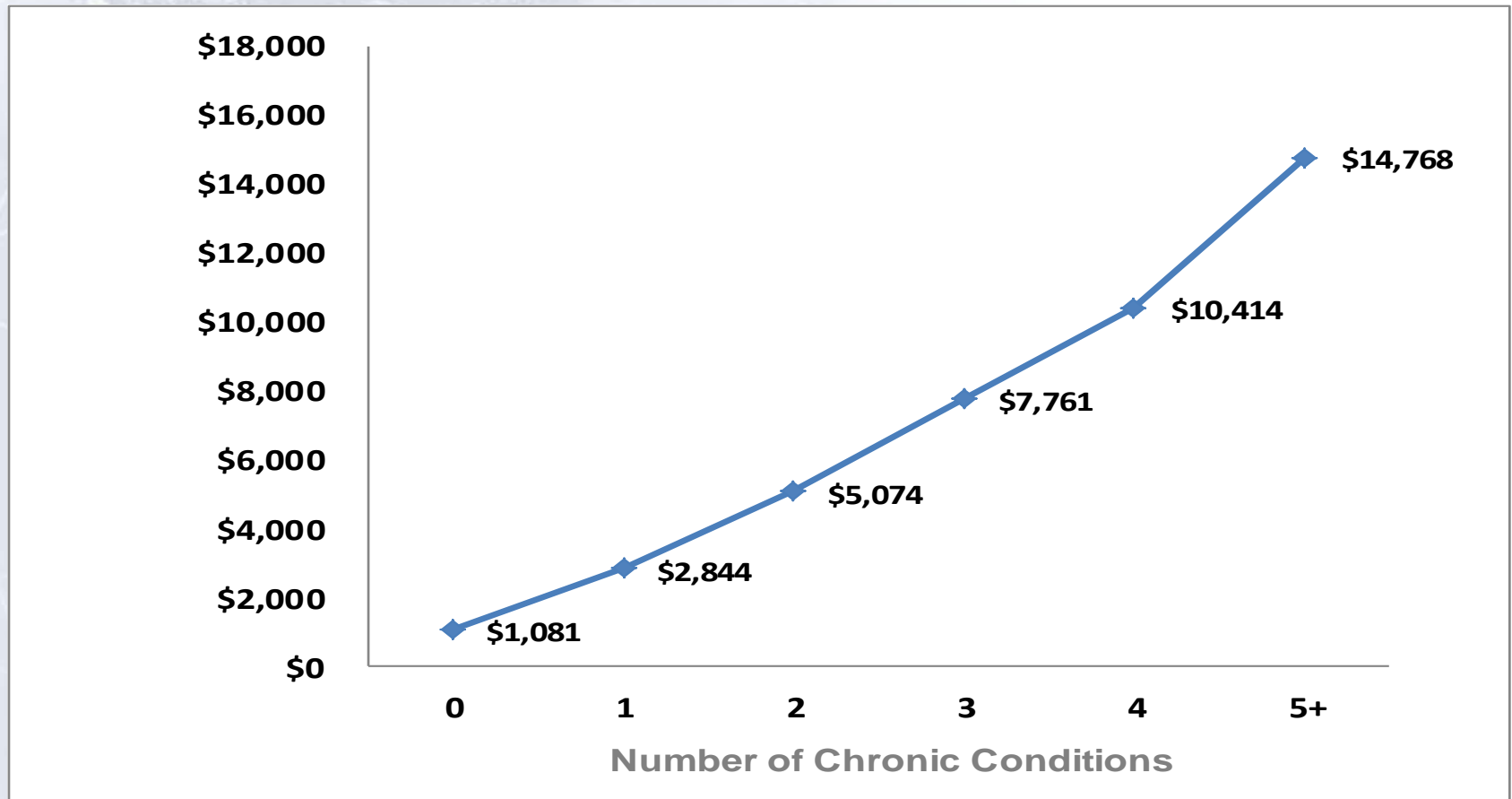
Adultos mayores según edad y limitación en algunas actividades instrumentadas de la vida diaria. Chile.



tableau



# HEALTH EXPEND AND NUMBER OF CRONIC DISEASE



Source: Medical Expenditure Panel Survey, 2006; Adapted from Anderson G. Chronic Conditions: Making the Case for Ongoing Care, February 2010, Robert Wood Johnson Foundation.

# CARE OF THE ELDERLY

# WHO CARE OLDER PERSONS?

- Health care professionals without training in the medical care of older persons
- Community health workers without the supervision or the tools to care for older adults
- Family caregivers without the support of the community

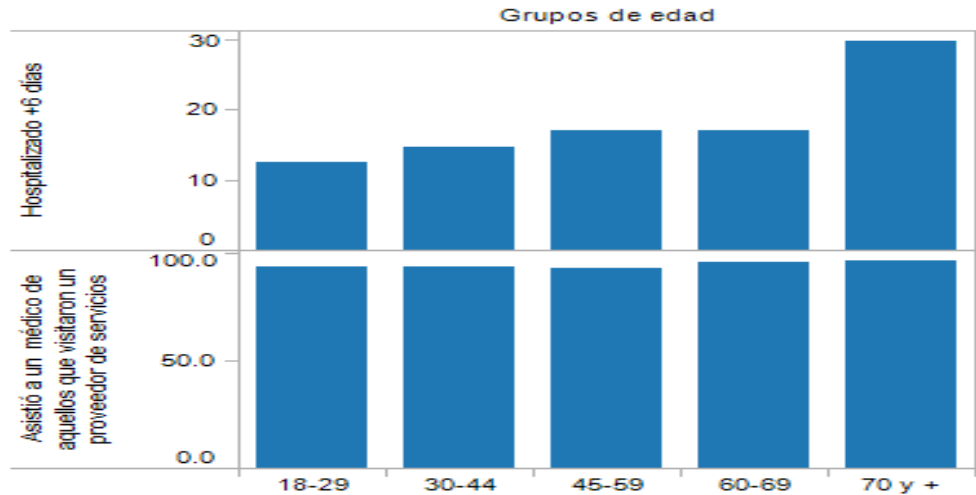
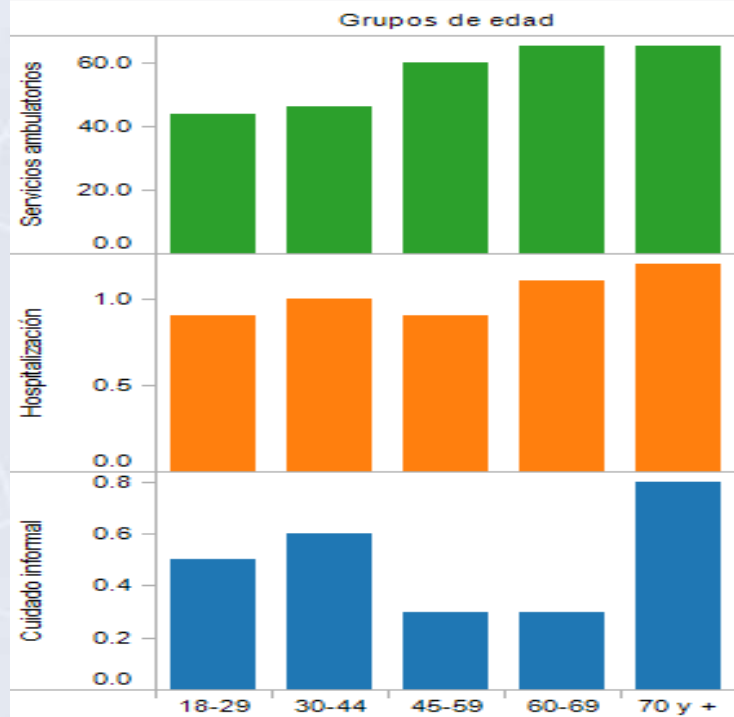
- Forty percent of those surveyed by SABE who suffered from hypertension had not had a primary care consultation in the last 12 months
- Only 27% of women reported having had a mammogram in the last two years
- 80% of respondents reported having unmet dental needs
- According to the research, 69% of older adults were not vaccinated against influenza.
- Only 2% of the countries have health promotion goals for people over 60 years of age.

# HEALTH SERVICES AND AGE

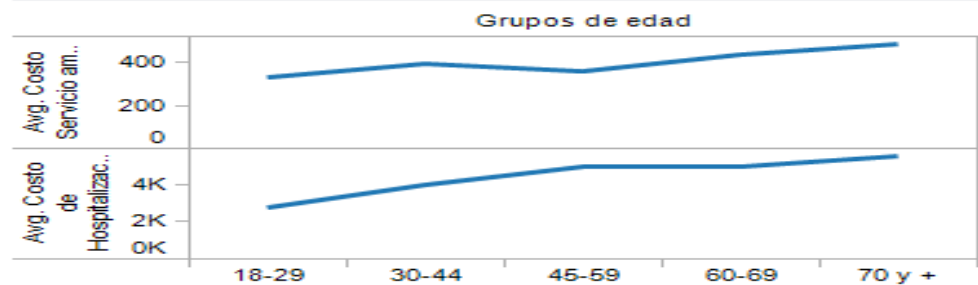
**País**  
México

**Uso de servicios de salud por edad. México, año 2003.**

**Uso de servicios de salud según grupos de edad. México, Año 2003.**



**Costo promedio por edad y tipo de servicio. México, año 2003.**



(Clic sobre el gráfico para actualizar los restantes)  
Fuente: World Health Survey (WHS).

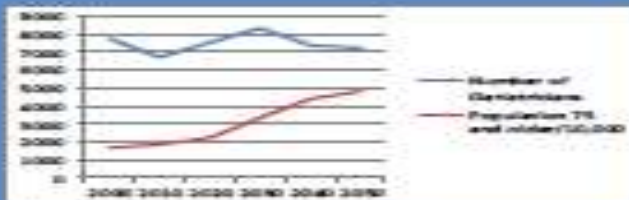
tableau

- In the region, it is families, and especially women (90%), that provide most of the care for older people
- Caregivers, usually over 50, are subject to very high levels of stress, with 60% of them saying that they “cannot do any more”
- More than 80% reporting problems “meeting expenses.”

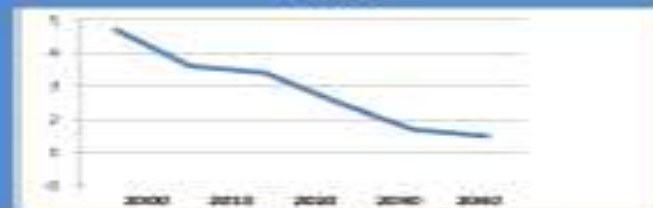


THERE IS A GREAT DISPARITY IN THE REGION  
BETWEEN THE AVAILABILITY AND ALLOCATION  
OF TECHNICAL AND HUMAN RESOURCES  
BETWEEN AND WITHIN COUNTRIES

Increase in Elderly Population But Decrease in Geriatricians



Projection of Future Number of Geriatricians/10,000 Population 75 and older



Less than 3%

of today's medical students take even a single course in geriatrics.

Residency and fellowship training standards for geriatrics still do not exist in 3/4 of the specialties important to older people.

It is estimated that by 2030, **3.5 million** additional health care professionals and direct-care workers will be needed in the United States.

NOTES

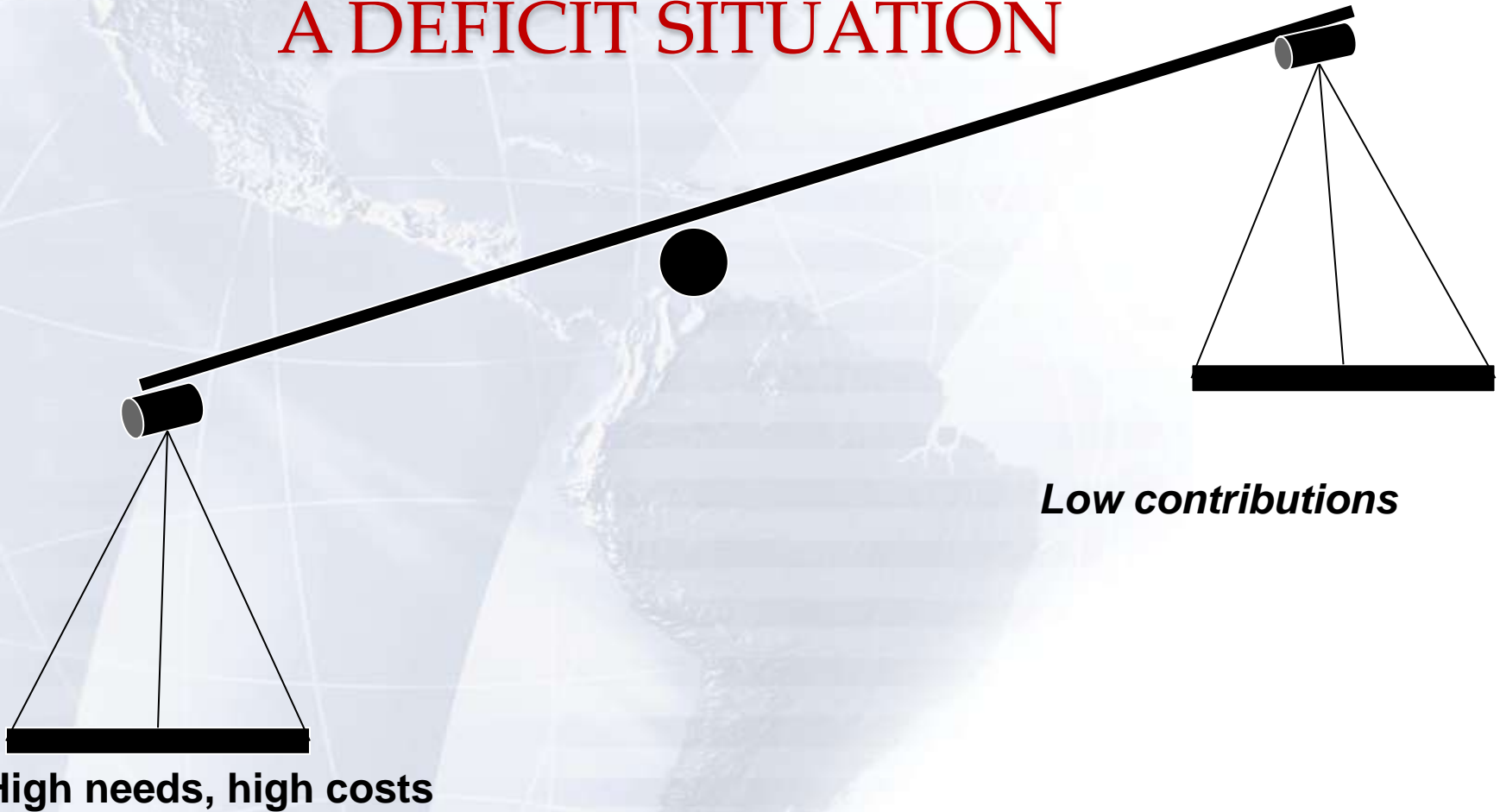
What is the United States doing to prepare for the increased demand for geriatricians in the United States?

Is the Ministry of Health working to increase the number of schools that offer gerontology courses?

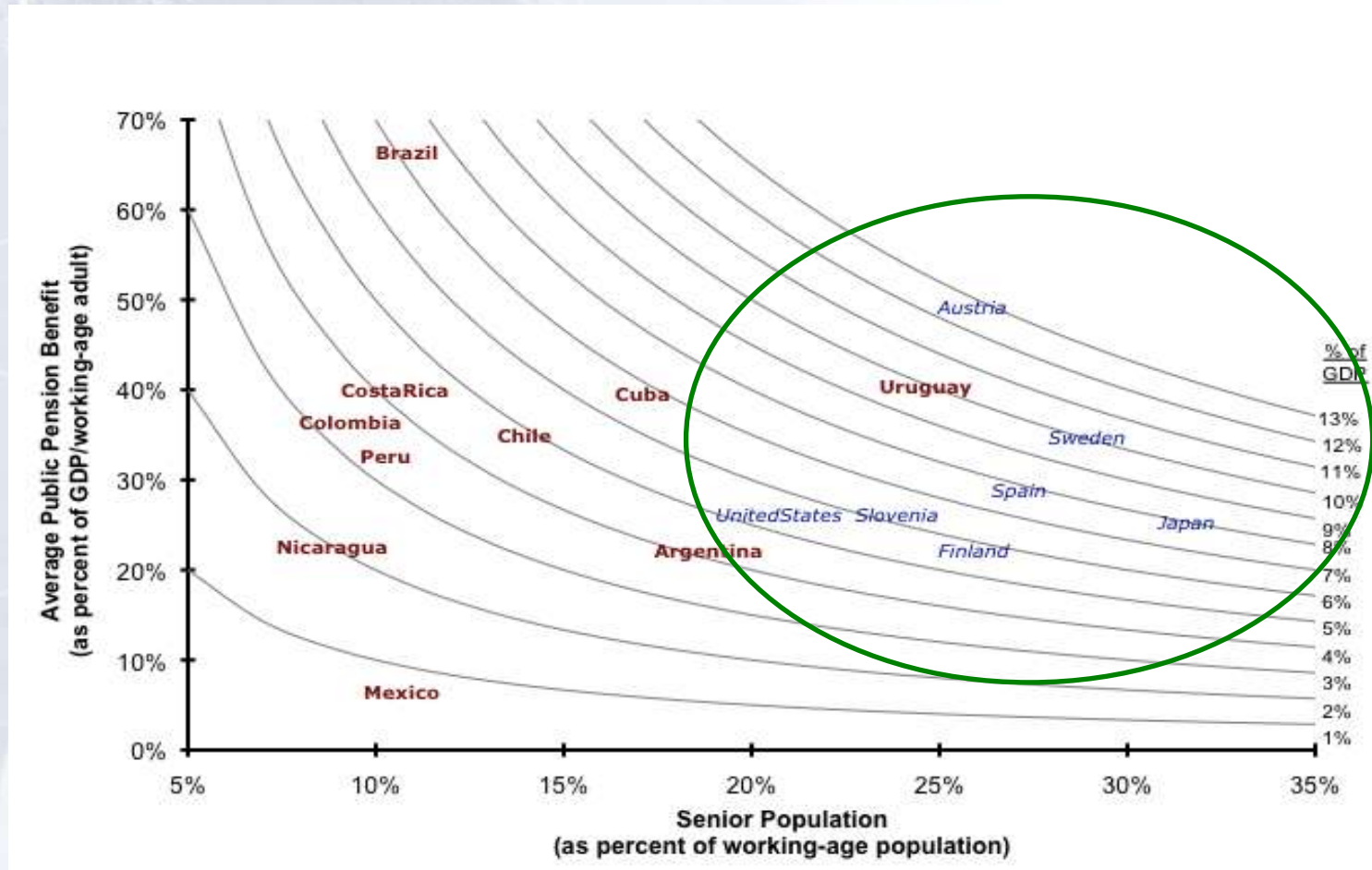
**Recommendation:** Workforce efforts must focus on recruitment, training, retention and compensation of health care providers serving older adults.

# PERCEPTIONS OF THE IMPLICATIONS OF AN AGING SOCIETY

## A DEFICIT SITUATION

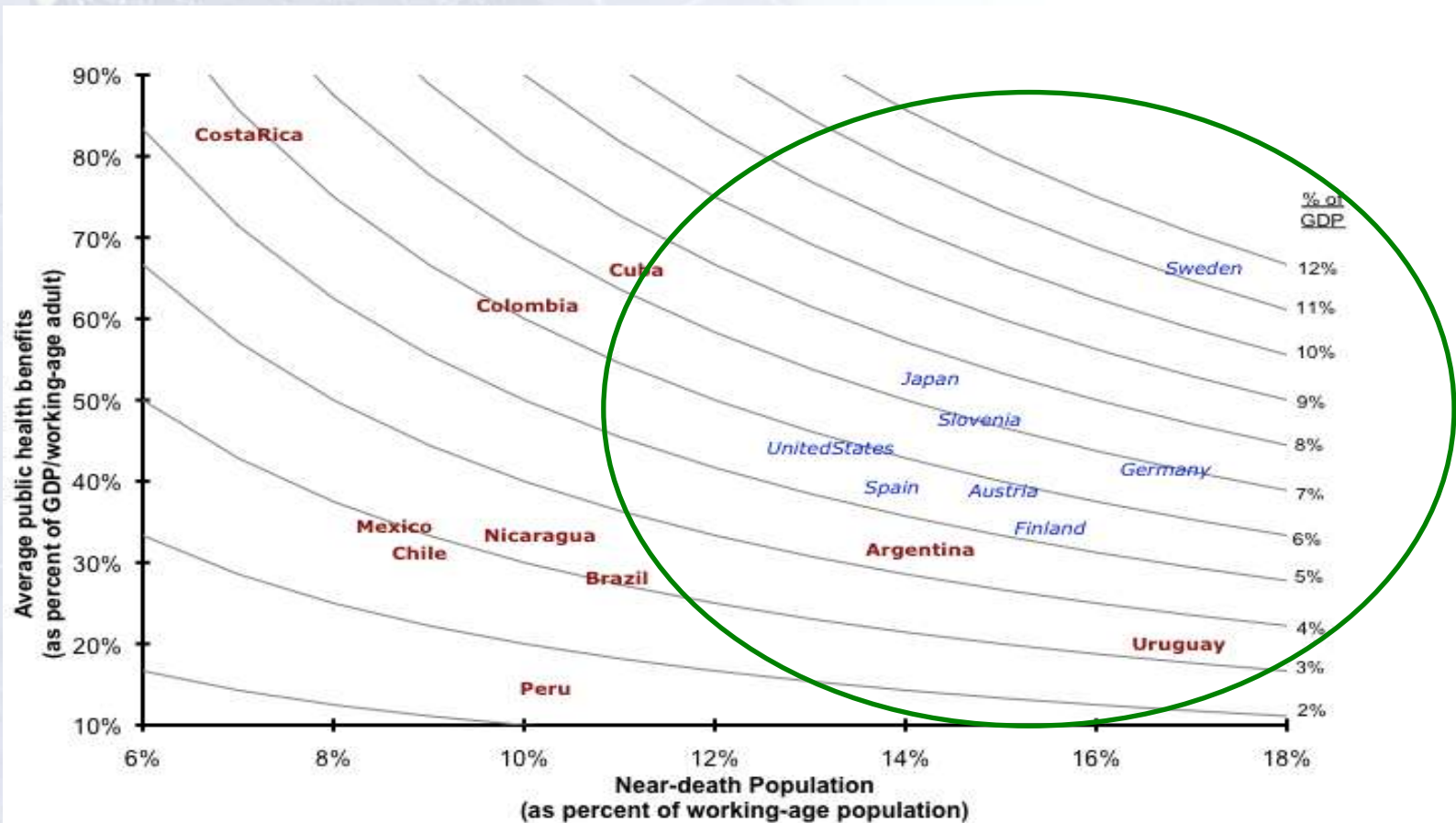


# % DEL PIB EN PENSIONES PÚBLICAS, POR DEMOGRAFÍA Y GENEROSIDAD





# % DEL PIB EN SALUD PÚBLICA, POR DEMOGRAFÍA Y GENEROSIDAD

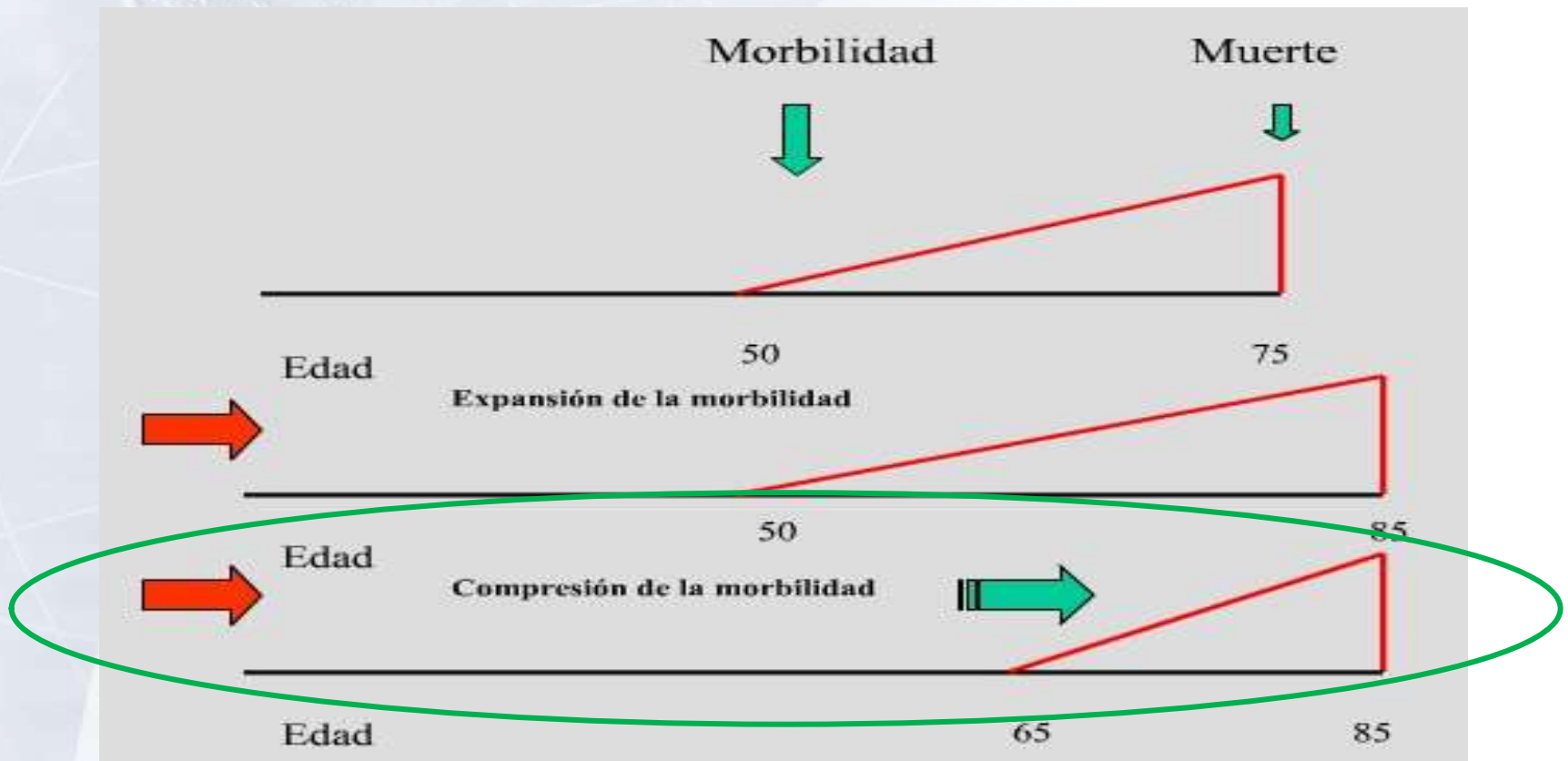


# AN AGING SOCIETY COULD BRING BENEFITS AS WELL AS COSTS



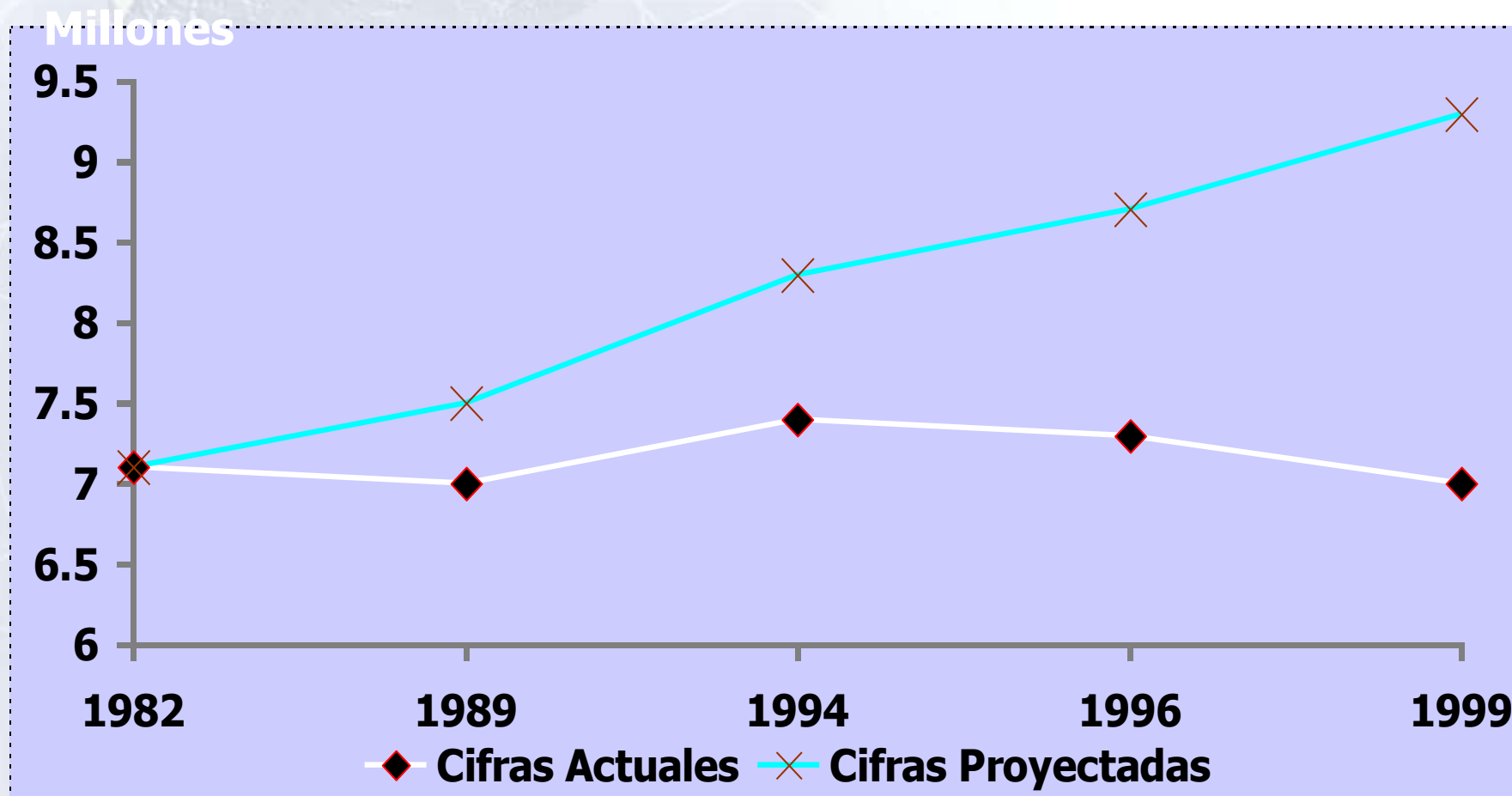


# ESPECTANCY OF LIFE & MORBILITY EXPECTED SCENARIOS



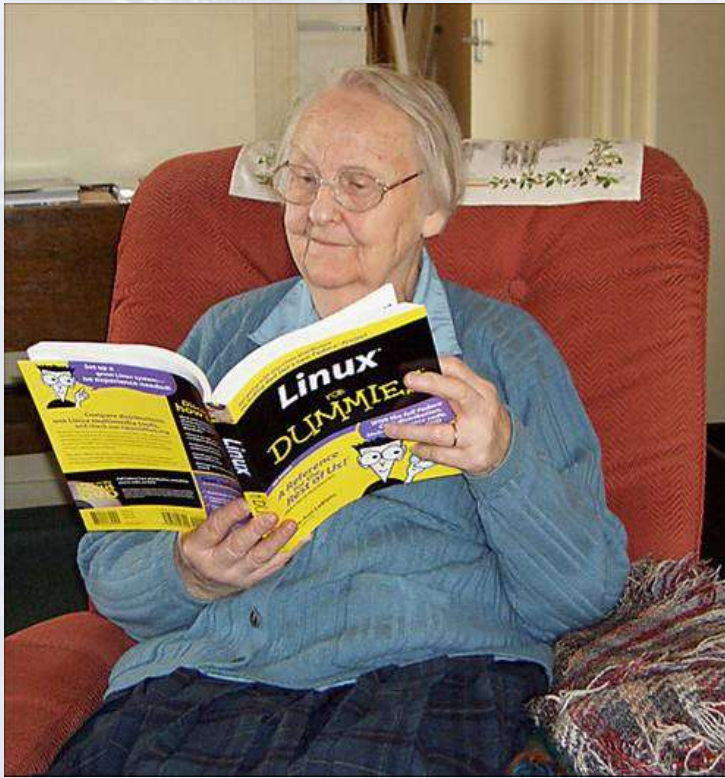
JF Fries Aging, natural death, and the compression of morbidity.  
*NEJM* 1980, Volume 303:130-135.

# DISABILITY PROYECCION IN SENNIORS USA



# WHY NOW?

- Society has the unique development opportunity to take advantage of the increase of longevity
- Today health and social investment can produce a maximum level of positive repercussions



**Could the world don't  
consider the 2000 million  
that will take the world  
over?**

# HEALTHY & ACTIVE AGING



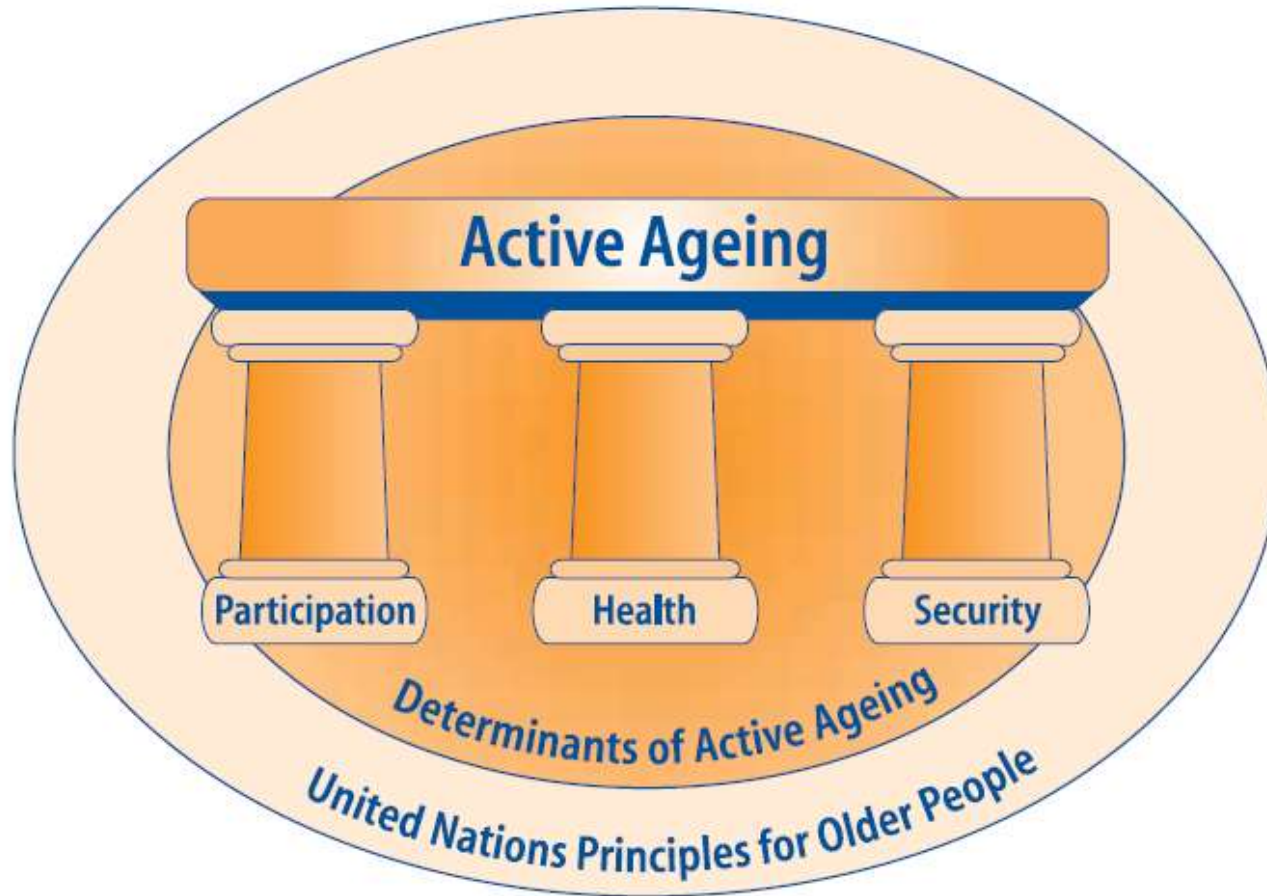
# ACTIVE AGING

Active ageing is the process of **optimizing opportunities** for health, **participation** and security in order to enhance quality of life as people age. It applies to both individuals and population groups.

WHO 2001



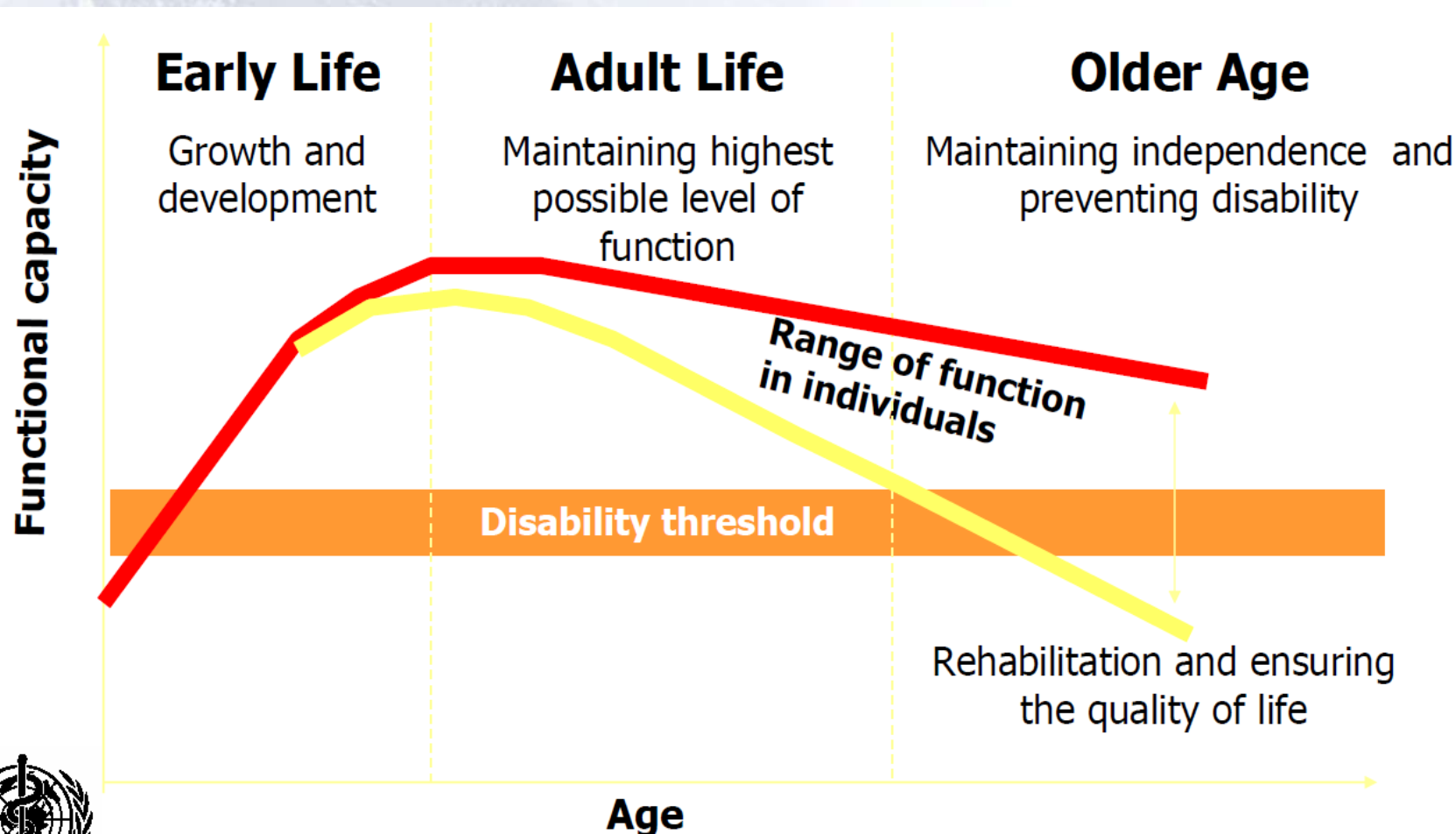
**Figure 14. The three pillars of a policy framework for Active Ageing**



**Figure 8. The determinants of Active Ageing**



# MAINTAINING FUNCTIONAL CAPACITY AND PREVENTING DISABILITY ACROSS THE LIFE COURSE



*John Glenn (77 years old). Octubre , 1998,  
Space Shuttle Discovery's*





## Vitamin D Treatment for the Prevention of Falls in Older Adults: Systematic Review and Meta-Analysis

Rita Rastogi Kalyani, MD, MHS,\* Brady Stein, MD, MHS,<sup>†</sup> Rita Valiyil, MD, MHS,<sup>‡</sup>  
Rebecca Manno, MD, MHS,<sup>‡</sup> Janet W. Maynard, MD, MHS,<sup>‡</sup> and Deidra C. Creus, MD, ScM<sup>§</sup>

**OBJECTIVES:** To systematically review and quantitatively synthesize the effect of vitamin D therapy on fall prevention in older adults.

**DESIGN:** Systematic review and meta-analysis.

**SETTING:** MEDLINE, CINAHL, Web of Science, EMBASE, Cochrane Library, LILACS, bibliographies of selected articles, and previous systematic reviews through February

**CONCLUSION:** Vitamin D treatment effectively reduces the risk of falls in older adults. Future studies should investigate whether particular populations or treatment regimens may have greater benefit. *J Am Geriatr Soc* 58:1299-1310, 2010.

**Key words:** vitamin D; falls; elderly; randomized controlled trials; systematic review

## Healthy Aging Persons and Their Brains: Promoting Resilience Through Creative Engagement

Susan H. McFadden, PhD<sup>a,\*</sup>, Anne D. Basting, PhD<sup>b</sup>

### KEYWORDS

- Creativity • Resilience • Dementia
- Psychosocial intervention • Flourishing

*Clin Geriatr Med* 26 (2010) 149–161  
doi:10.1016/j.cger.2009.11.004

Most older people respond to researchers' questions about their well-being by affirming satisfaction with their lives. They do this despite mounting losses in physical func-

## Physical Activity Over the Life Course and Its Association with Cognitive Performance and Impairment in Old Age

Laura E. Middleton, PhD,\* Deborah E. Barnes, PhD,<sup>†‡</sup> Li-Yung Lui, MS,<sup>§</sup> and Kristine Yaffe, MD<sup>†‡§\*</sup>

**OBJECTIVE:** To determine how physical activity at various ages over the life course is associated with cognitive impairment in late life.

**DESIGN:** Cross-sectional study.

**SETTING:** Four U.S. sites.

**PARTICIPANTS:** Nine thousand three hundred forty-four

early in life and throughout the life course. *J Am Geriatr Soc* 58:1322–1326, 2010.

**Key words:** physical activity; exercise; cognition; cognitive impairment; life course

## Use of the Internet to Assist in the Treatment of Depression and Anxiety: A Systematic Review

Alan G. Wade, MBChB

**Objective:** This systematic review aims to describe the Internet's potential role in assisting patients with depression and anxiety.

**Data Sources:** A MEDLINE search was conducted of articles published between 1998 and 2008 using the terms *depression and anxiety* and *Internet, computers and depression*

***Zuckerberg received Florence (101 years),  
the oldest Facebook member....***



***Facebook, users average age 40,5 years.***



# MAKING ACTIVE AGING WORK FOR OLDER PERSONS

## Three challenges:

- **Creating structural supports that help older adults become involved**
- **Creating flexibility to accommodate their changing needs**
- **Maximizing engagement – not just participation**



© AP Photo/Scotiabank Toronto Waterfront Marathon

# WHAT DO OLDER US ADULTS CURRENTLY DO?

- 21% are in the labor force
- 21% are involved in volunteer work
- 20% participate in caregiving
- 25% reported having enrolled in a class in the previous 5 years

National Institute on Aging, Longitudinal Health and Retirement Study, 2008  
(Source, last fact: AARP, for age 50+)



# Aging and Health

*Running against time*



# BUILDING A VISION OF HEALTH OF OLDER PERSONS

- Resolution CSP26.R20 on Health and Aging in the 26th Pan American Sanitary Conference (2002)
- International Plan of Action on Aging. World Aging Health Assembly (2002)
- I Regional Intergovernmental Conference for Latin America and the Caribbean (2003)
- II Regional Intergovernmental Conference on Aging in Latin America and the Caribbean (2007)
- Primary Health Care Declaration (2006)
- Health Agenda for the Americas 2008-2017 (2007)
- Plan of Action in Aging and Health (2009)

# STRATEGIC APPROACH AND PLAN OF ACTION

Health sector's response to the health needs of older persons

- Guided by the values of the UN Principles for Older Persons
- Country driven needs and appropriate responses
- Calling for a shift by the international community to tackle the new challenges

**Approved**



# STRATEGIC APPROACH AND PLAN OF ACTION

## FOUR PRIORITY STRATEGIC AREAS:

- Health of older person in public policy and its adaptation to international agreements & strategies
- Adapt health systems to population aging challenges and the health needs of older persons
- Train human resources necessary to meet the health needs of older persons
- Strengthen the capacity to generate the necessary information for executing and evaluating activities to improve the health of the elderly population

# A WINDOW OF OPPORTUNITY

The next 40 years, the Region's demographic situation will offer a window of opportunity. Only through adequate social and health investment will it be possible to achieve healthy and active longevity resulting in a lower economic burden in the future.

**PLAN OF ACTION ON THE HEALTH OF OLDER PERSONS,  
INCLUDING ACTIVE AND HEALTHY AGING. PAHO, 2009**

