



PBSS

CANCUN MEXICO
COLLOQUIUM 2017
DEFINING AMBITION

Long-Term Care

An Actuarial Perspective on Societal and Personal Challenges

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Topics covered

- The PIWG paper
- The importance of the problem
- Underlying needs
- Satisfying the needs
- Financing the needs
- Challenges
- Approaches and criteria
- Role of the actuary

The IAA Report

- Prepared by the IAA's Population Issues Working Group
 - Published in April 2017

http://www.actuaries.org/LIBRARY/Papers/PIWG_LTC_Paper_April2017.pdf

- Scope
 - Focuses on LTC needs of the elderly, although other population segments are also in need of these services
 - Includes eight national case studies (U.S., Japan, Germany, France, Benin, Switzerland, Israel, U.K.)
- Objective
 - Upgrade attention given to LTC by actuaries worldwide

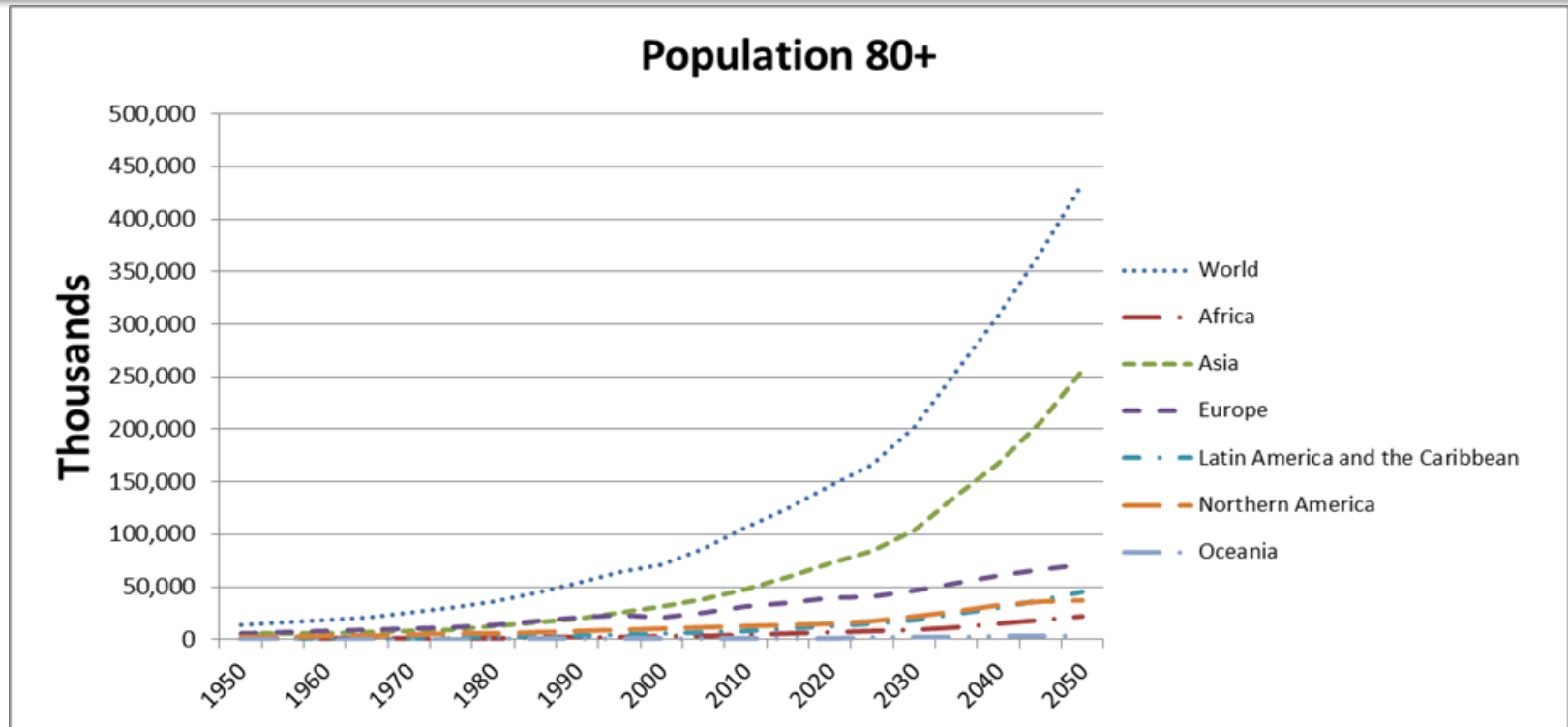


How important is LTC ? VERY

- The aging of society
 - The downside of improvement in mortality and lower fertility
 - In countries with a post World War II baby boom
 - Explosion of LTC needs will emerge in the 2030s
- Demographic and lifestyle changes
 - Smaller and less close families
 - Increased mobility
 - In all countries
- Corresponding increase in demand for caregivers and other support



Demographic explosion



Source: United Nations 2015 Revision of World Population Prospects

- Number of people age 80 and older is expected to increase from about 120 million now to more than 400 million in 2050
- Largest number will be in Asia

Percent of population age 80 and older

Gender	F	M	F	M	F	M	F	M
Country	Canada		China		France		Germany	
1970	1.8	1.3	0.4	0.2	3.2	1.4	2.4	1.4
1990	3.0	1.6	0.8	0.4	5.0	2.3	5.2	2.2
2010	4.9	2.9	1.6	1.1	6.9	3.8	6.8	3.4
2015	5.1	3.3	1.9	1.3	7.6	4.5	7.2	4.1
2030	7.4	5.6	3.4	2.4	9.2	6.4	9.4	6.6
2050	11.8	9.5	10.2	7.8	13.2	8.8	16.1	12.7
Country	Italy		Japan		South Africa		United States	
1970	2.2	1.4	1.2	0.6	0.6	0.3	2.3	1.5
1990	4.3	2.2	3.0	1.7	0.5	0.2	3.7	1.8
2010	7.4	4.2	8.1	4.4	1.2	0.7	4.5	2.7
2015	8.5	5.1	9.8	5.6	1.3	0.6	4.6	2.9
2030	11.5	7.8	15.4	9.8	1.7	0.4	6.3	4.5
2050	18.0	13.1	18.1	12.0	2.9	1.2	9.4	7.3

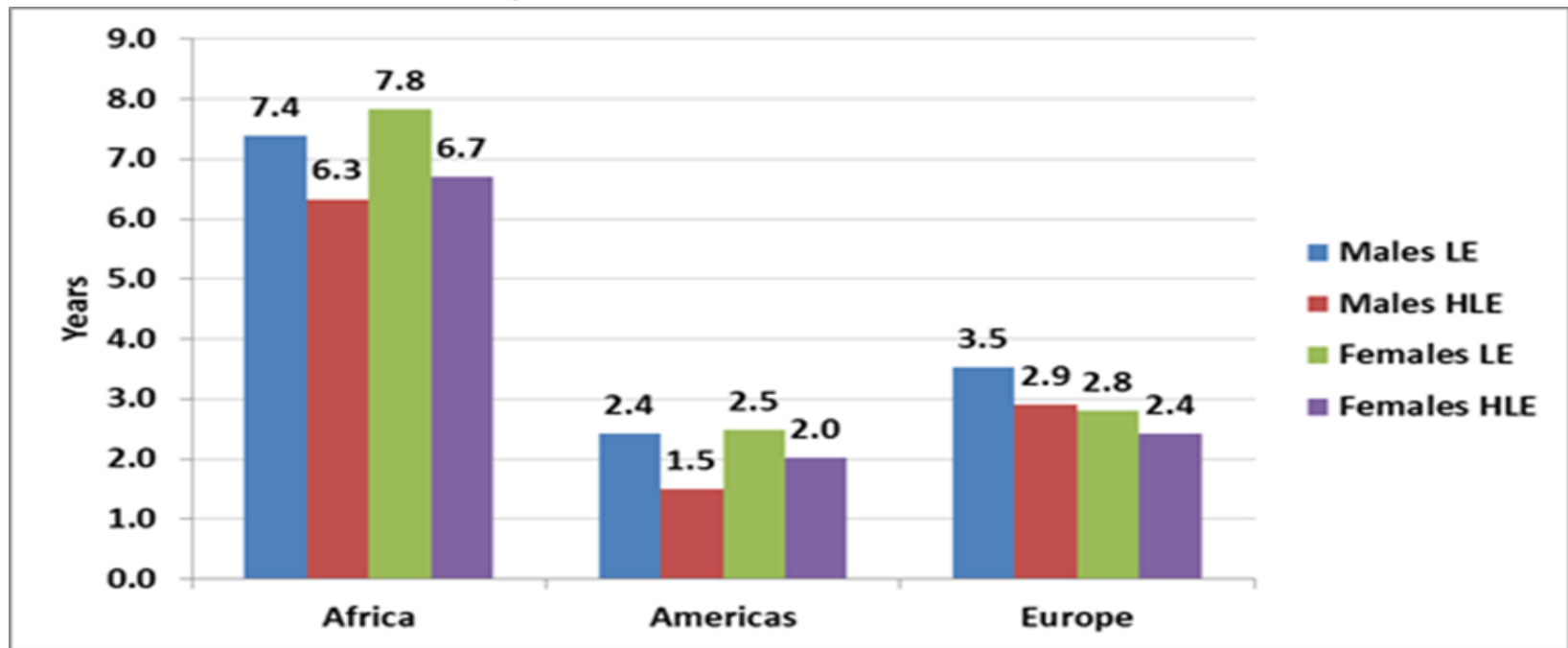
Source: World Bank

- Significant increase in most countries (other than South Africa)
- Caused by increased longevity and decreased fertility



Trends in mortality & morbidity compression

Life expectancy (LE) and Healthy life expectancy (HLE) Changes between 2000 and 2013



Source: World Health Organization

- Shows an expansion of period of ill-health
 - Although certain studies have shown a compression
- Significant differences by income, especially for healthy life expectancy



Underlying needs

- Residence
- Assistance in performing activities of daily living
- Preserving independence and autonomy
- Medical / nursing
- Affordability (financing)

Satisfying needs - Residence

- Home / community
 - “Aging-in-place”
 - Psychologically and financially better if at home or in community
- Facility
 - Assisted living facility
 - Continuing Care Retirement Communities
 - Nursing home
 - No one wants to use this option, but it is often necessary
- Hospice
 - End-of-life care



Satisfying needs – Assistance with daily life

- Through caregivers
 - Informal
 - Family, friends and neighbors
 - Comes with psychological and work-related burdens
 - Community
 - Formal (paid)
 - At home
 - Facility staff
 - Long-term concerns
 - Supply – will there be enough?
 - Training – caring for the elderly is different
- Promoting independence and autonomy as much as practical



Satisfying needs – Medical / nursing

- Relation with acute care
 - Hospital transitions can represent a cost or appropriateness problem
- Availability
 - At home or community
 - In-house in institutions
- Purchasing and taking medicine
- Will future supply be adequate (compensation)

Financing the needs

PUBLIC/GOVERNMENT

(National or local)

PRIVATE

Social Security

- General tax dollars
- Norway/Scotland
- Inheritance tax

Social Insurance

- Contributory
- Payroll (Germany/Japan)
- Income tax (Netherlands)
- Medicare (USA)

Private Insurance

- Standalone
- Hybrid Life/Annuity Products
- Benefits
 - Lump sum
 - Periodic
- Conversion from DI Products

Social Assistance / Means Test / Safety Net / Social Care

- Canada
- Medicaid (USA)
- Israel
- UK

National Healthcare System

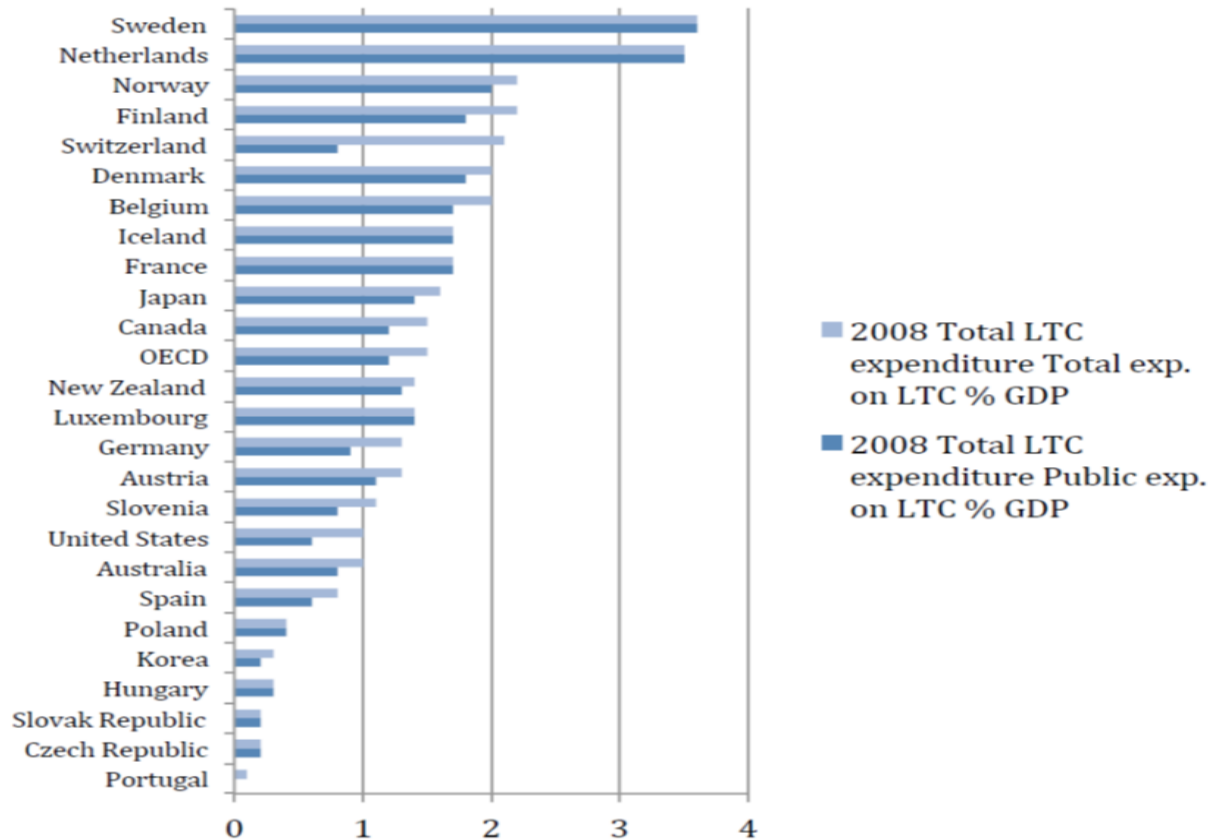
- Belgium
- Italy
- Australia

Personal Savings

Home Equity

Family, Friends, Community and charitable means

LTC expenditures



Source: OECD Health Data, 2011

- Wide range, depending on generosity of benefits and extent of aging



Challenges

- Cost / affordability
 - Personal – LTC services can be expensive
 - Society – sheer numbers will drive this issue
 - Insufficient savings to finance total needs
 - Thus, need for wide-level of support
- Caregiving – supply and quality of care
 - Availability of informal care
 - Low fertility rate, so fewer children
 - Mobility of children
 - Higher labor force participation, particularly females
 - Supply and demand for formal care
 - Specialty training needed
- Aging at home
 - Impractical for some, especially those suffering from mental conditions and those with limited available support



International approaches

- Wide range of approaches
- Typically piecemeal
- Importance given to developing solutions
 - Primarily depends on degree of population aging
 - Huge potential costs that are and will present significant budgetary problems
- In many countries, LTC has not been given sufficient policy attention
 - Will have to address in the next two decades
 - Need effective coordination with social assistance, healthcare and retirement programs



Possible solutions

- Every country may end up with its own approach
 - Considering its own values
 - Will likely emphasize aging-in-place or home LTC delivery
 - Often best for the individual
 - Better to control costs
 - Will not be practical in all cases
- Some type of means-testing or social insurance likely
- Personal responsibility – for middle class
 - Combination of personal savings and private insurance



The Long-Term Care crisis

- Coming to your country in the future
 - Increasing population exposed and cost
 - Even if relatively small elderly population
- Especially of concern for the middle class
 - The rich can afford
 - The poor will be means-tested
- Need better coordination of programs to avoid gaps
 - Retirement programs
 - Taxwise – treat similar to retirement benefits
 - Acute health care
 - Enhance savings programs (not just for LTC)
- Mandatory public-private coordination



Program design and cost control

- Preventive actions
 - Nutrition, physical/mental activity, social interaction
 - A challenge to encourage, without being a nanny-state
 - Encourage aging-in-place
- Cost-sharing
- Technology techniques
 - Residence changes, monitoring, medical sensing
- Caregiver and family support
 - Respite care, family leave
- Community programs
- Situs
 - Intermediate care approaches
 - Abuse control
 - Less expensive geographic locations
- Fee negotiation/caps



Raising awareness

- Priority of issue needs to be raised
- Effective education
 - Part of life cycle planning
 - Both personal and policy
 - Difficult because relevance may be a long time away
 - Insurance approach is complex and expensive
 - Saving enough is challenging
- Develop and disseminate technology
- Enhance coordination with
 - Acute care approaches
 - Retirement programs



Criteria for assessing a LTC program

- Coverage
- Benefit design
- Affordability
 - For individuals and society
- Appropriateness and quality of delivery
- Risk and cost management
- Sustainability of funding
- Avoiding unintended consequences

Role for actuaries

- Quantitative analysis
 - Considering benefit design
 - As much relevant data/information needed as possible
 - Identify cost-saving approaches
 - General population and sub-populations will not have the same experience
 - Projection uncertainty and understanding risks
- Benefit design
 - Help minimize moral hazard and anti-selection
- A single solution may not be optimal for all
- Potential to contribute to policy discussions



The Report

[http://www.actuaries.org/LIBRARY/Papers/
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