

Intergenerational and distributive impact of health spending in Latin America

André Medici
(LCSHH – The World Bank)

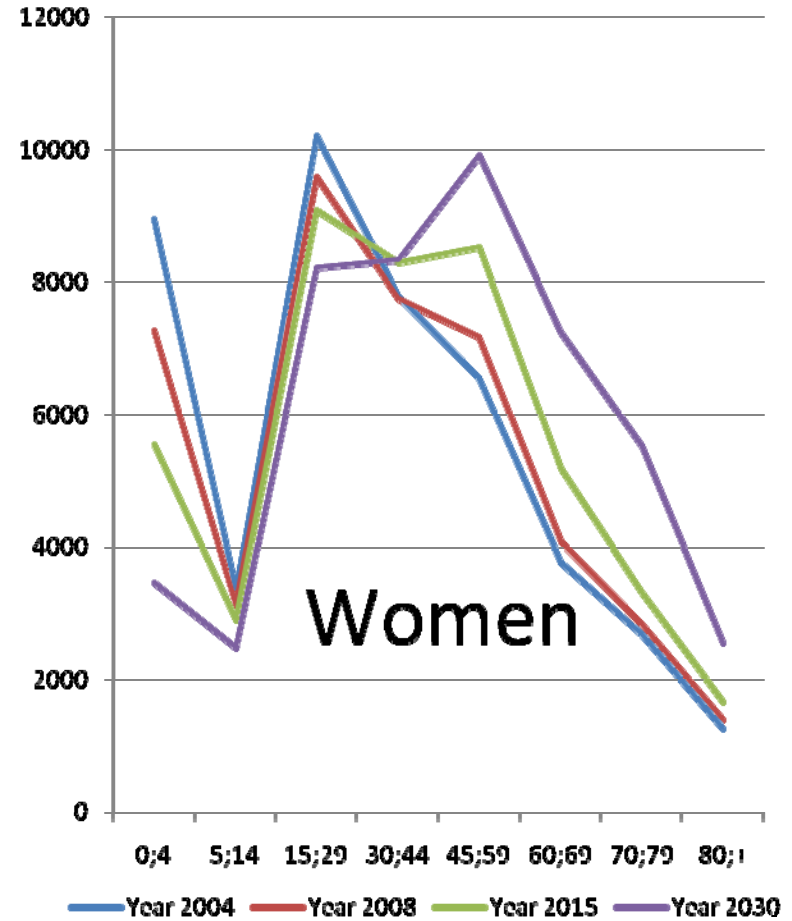
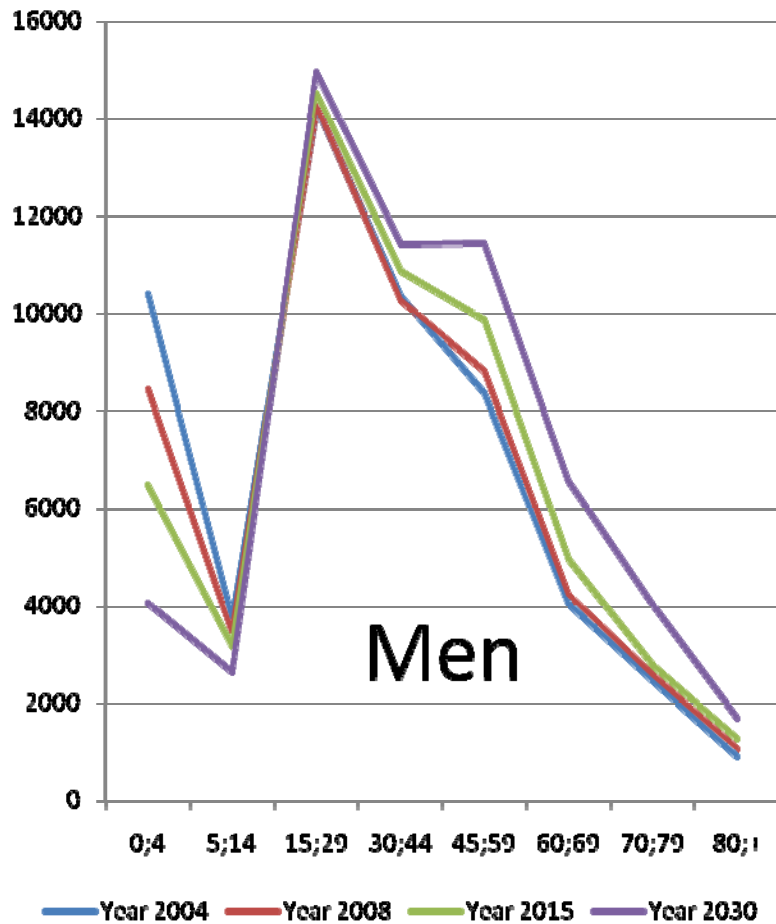
EXPERT GROUP MEETING ON POPULATION AGEING, INTERGENERATIONAL
TRANSFERS AND SOCIAL PROTECTION
Santiago, Chile, ECLAC Headquarters
20-21 October 2009

Contents

- Demographic transition – implications in health
- Trends in health care spending
- Economic implications of aging in health spending
- Health needs and health utilization
- Health spending and health costs
- Data problems
- Policy Implications

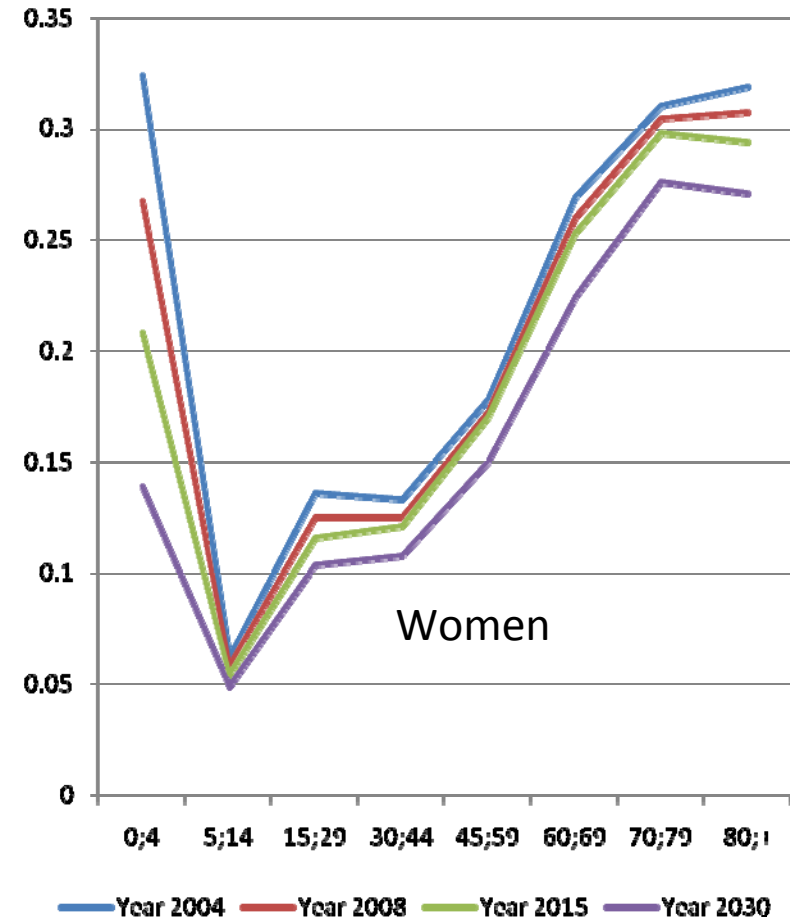
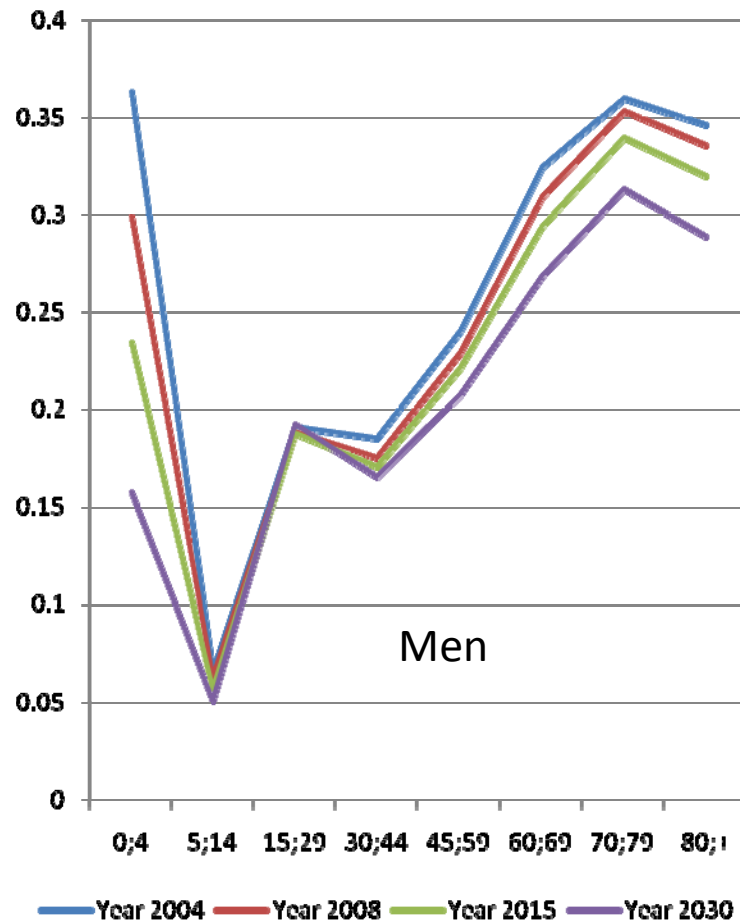
Health and Demographic Transition

DALY's losses distribution by age in LAC – estimations 2004-2030 (in thousand years)



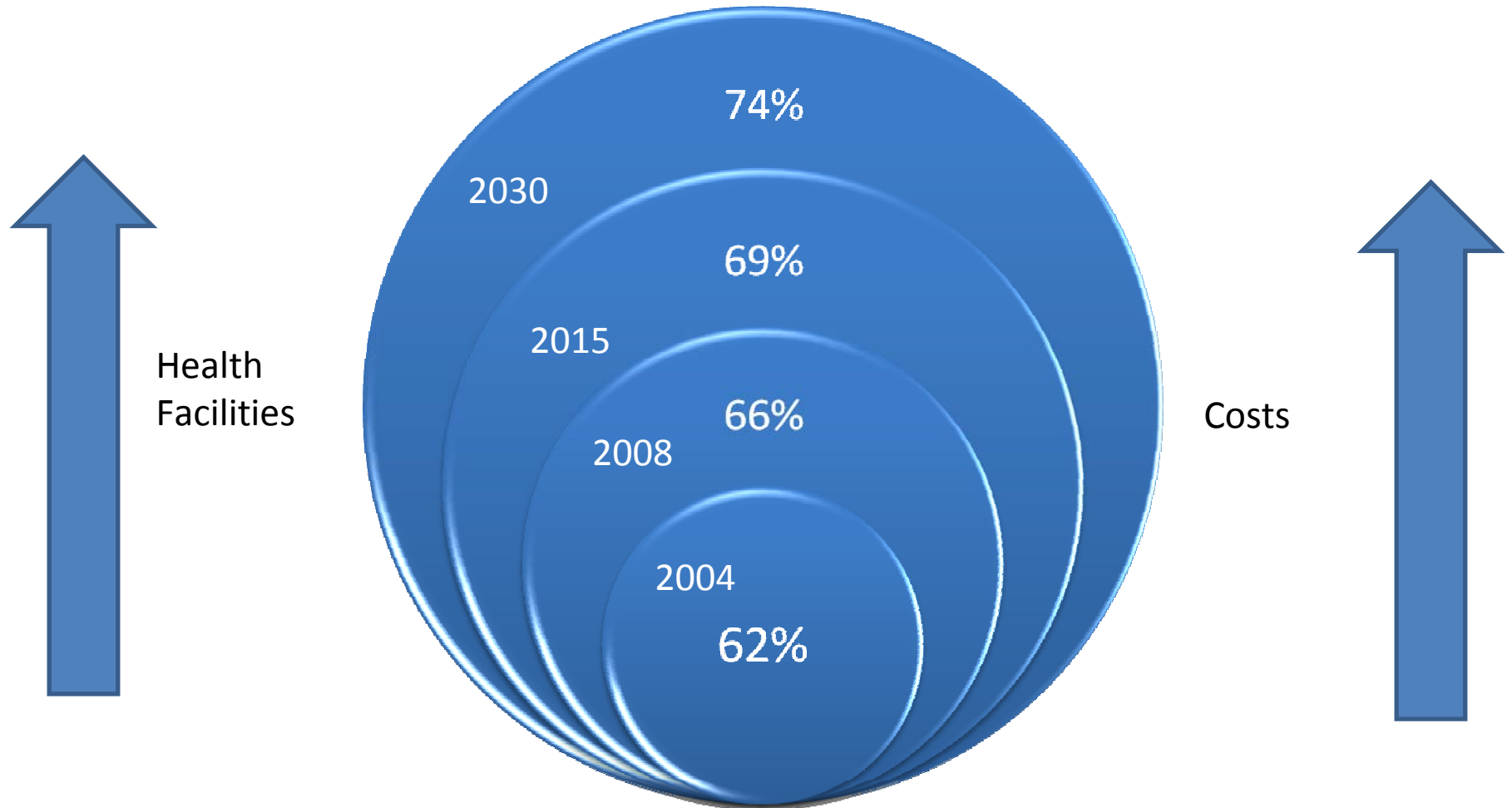
Total DALY Losses in the Years 2004-2030

The individual weight of the burden of diseases by age



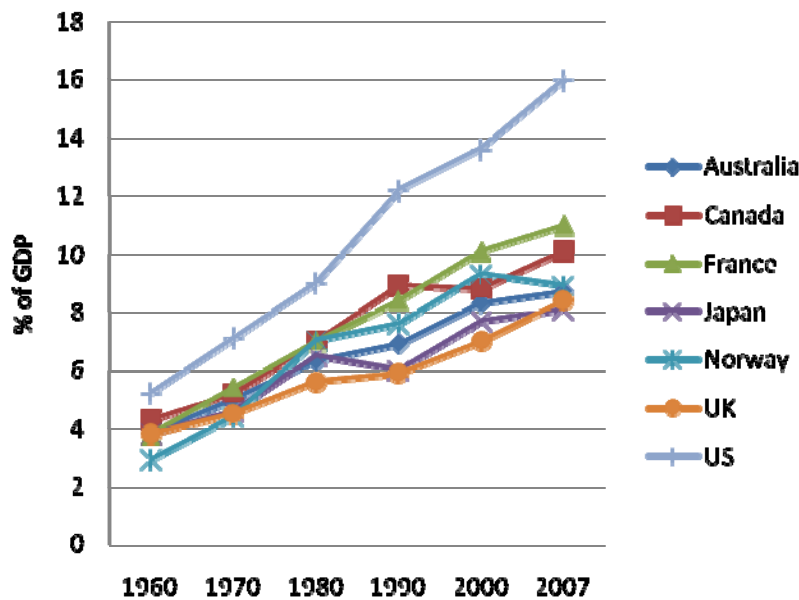
DALY LOSSES PER CAPITA IN LAC (YEARS) – 2004-2030

Weight of non-communicable diseases as a share of total DALYs

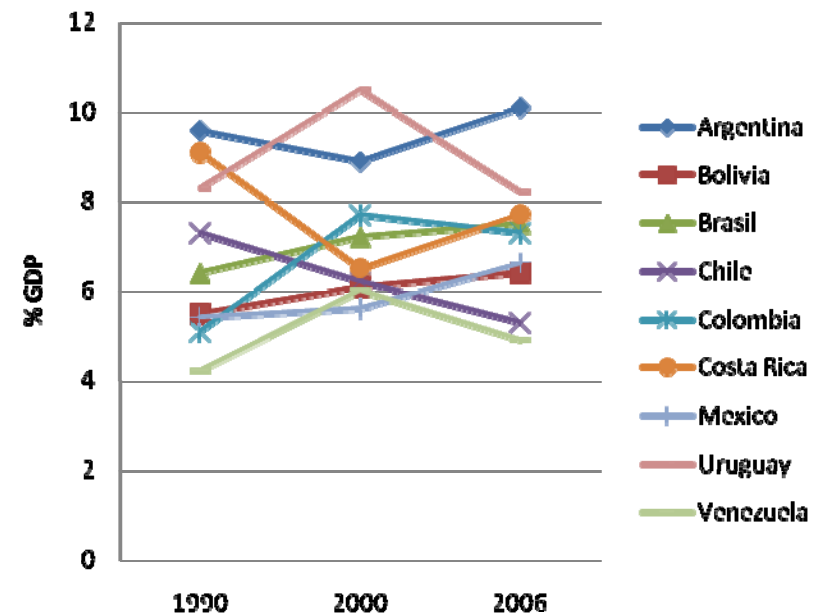


Trends in health care spending

Health Expenditures in OECD Countries 1960-2007



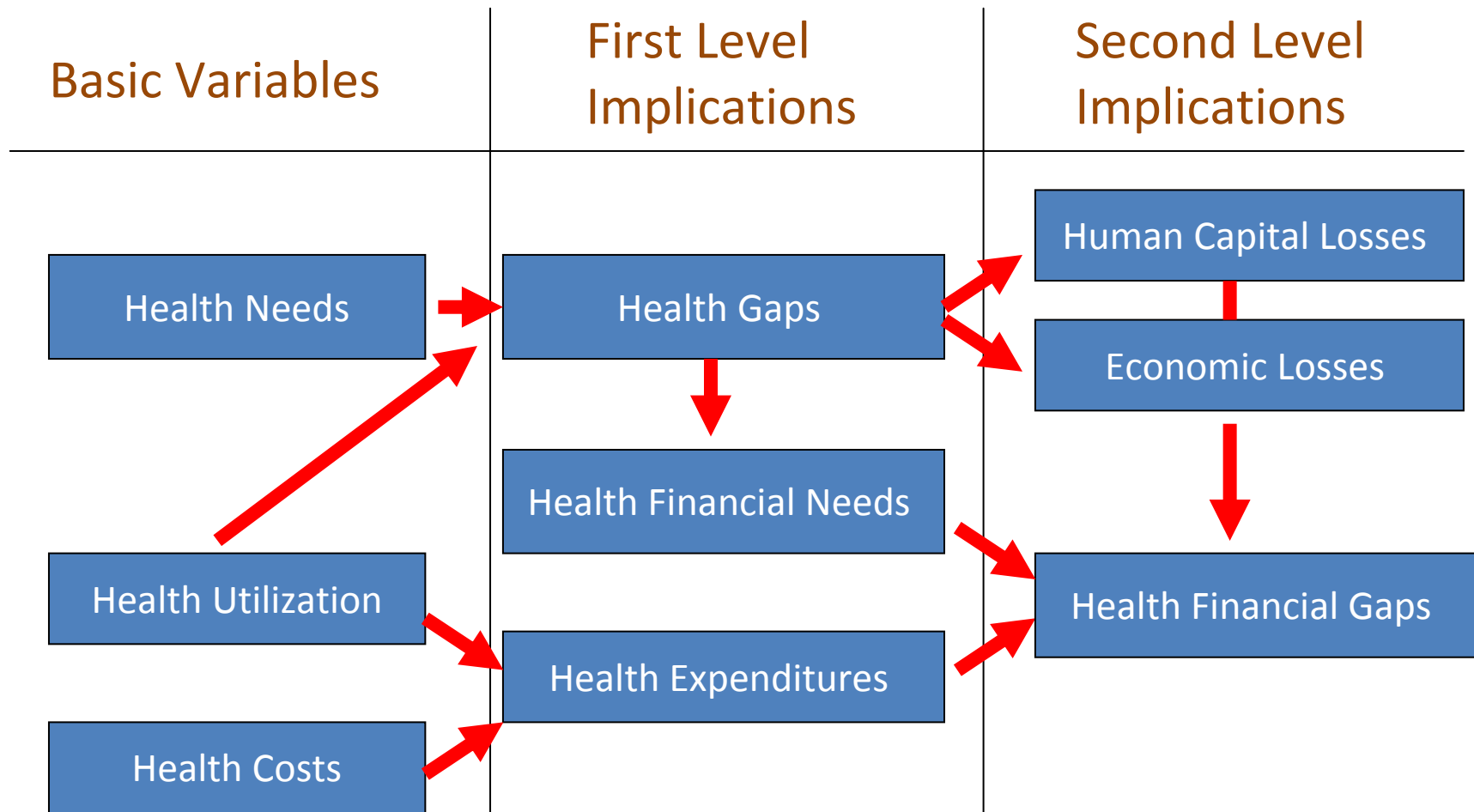
Health Expenditure in LAC Countries 1990-2006



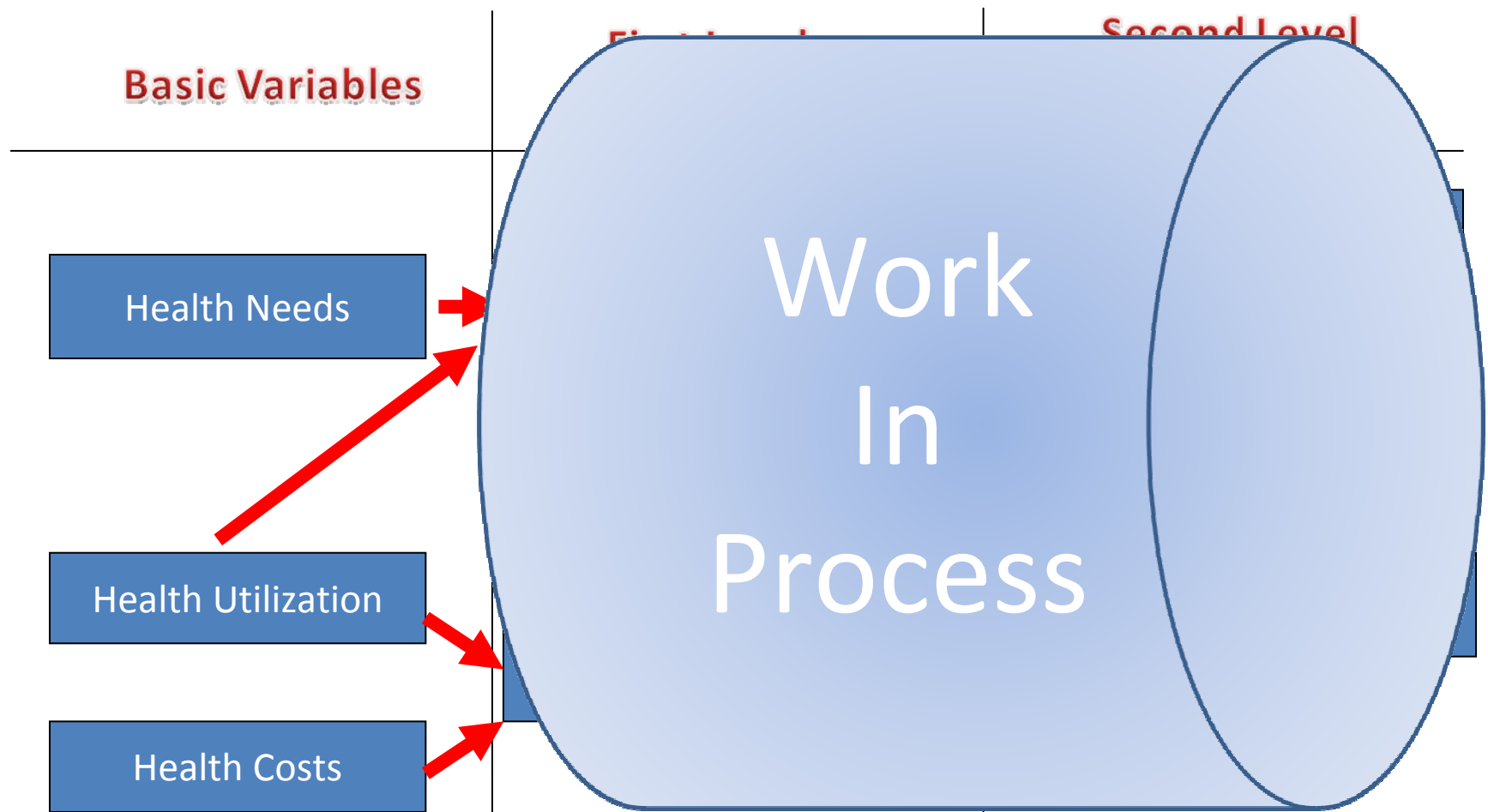
Why health spending increase? (What does the literature say?)

- Health Sector Internal Factors – cost inflation: health prices increase over the general price indexes
 - Imperfect competition (barriers to competition, third payer systems, information asymmetry)
 - Incorporation of medical technology (supply generates demand)
- External Factors – lead the volume of health provision increase faster the economic growth
 - Income effect – in some contexts elasticity of health expenditures is moderately inelastic. Health prices reflect local or regional incomes.
 - **Demographic Aging – increasing life span has direct correlation with increasing volume of health provision.**

Economic Implications of Aging in the Health Spending

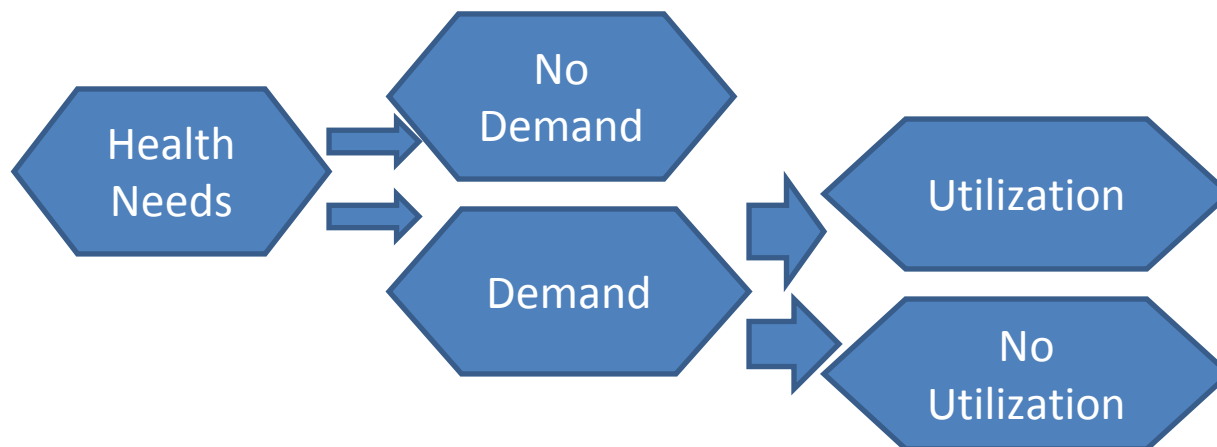


Economic Implications of Aging in Health



Health needs

- First, in the health sector, due several factors (asymmetric information, existence of services, distance and funds available by families; etc.) only part of the health needs materializes as health demand.
- Health needs, as perceived by the individuals, does not coincide necessarily with real health needs.
- Health demand is the expression of perceived health needs.
- Health utilization is an expression of part of the health demand that was met by the population by using health services



Finding an operational approach

- Household surveys measure utilization as a share of perceived health needs
- To get the expression of perceived health needs, household surveys ask if a person had some health problems in a given period of time (week or month of reference)
- For persons declaring that had health problems, it is asked if the person looked for health services and for those that answer yes, it is asked if the person was attended or not.
- MECOVI has a data compilation on house surveys in LAC. According to the data, 12 LAC countries have questions related with perceiving health needs and utilization

Perceived health needs in some LAC Countries (later nineties)

- MECOVI data from household surveys in 12 LAC countries.
- Perceived health needs according to age groups:
 - Childhood - 7% (BO) to 71% (PR)
 - Youth/Adult – 3% (JA) to 40% (PE, EC)
 - Elderly -19% (BR, CO) to 68% (EC)
- Perceived health needs increase from adulthood to elderly in all countries, except to men in Peru;
- Considering the average of these 12 countries,
 - perceived health needs are higher for adults and seniors in the poorest quintile compared with the richest one. The same does not happen with children.
 - Senior women declare to present more health problems than senior men in the poorest and richest income quintile

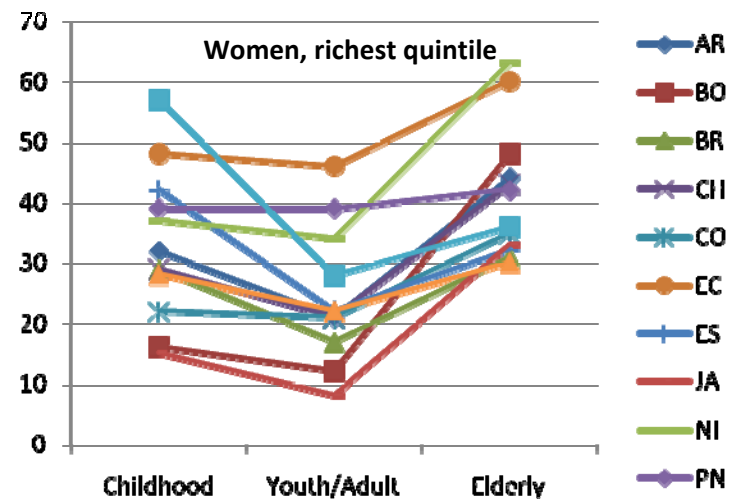
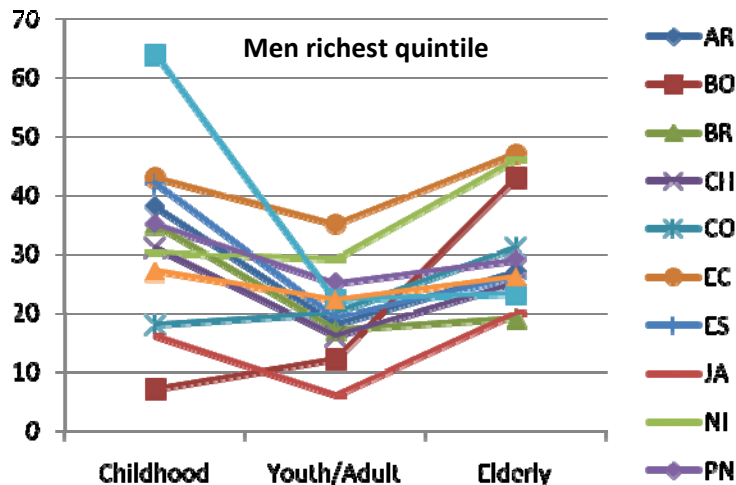
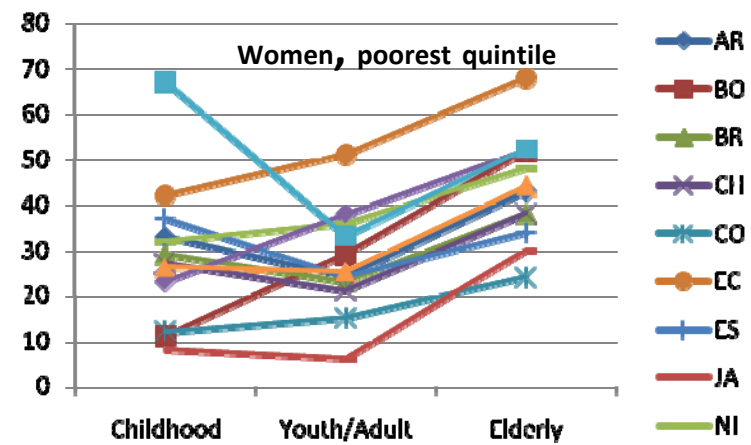
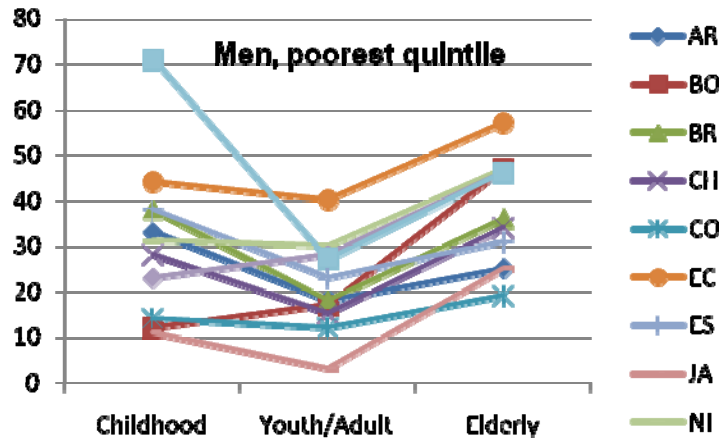
%Persons with perceived health needs as a share of total population (1997-1999 MECOVI Data) Poorest Quintile

	Men			Women		
	Childhood	Youth/Adult	Elderly	Childhood	Youth/Adult	Elderly
AR	33	18	25	33	24	43
BO	12	17	47	11	29	52
BR	38	18	36	29	23	38
CH	28	15	34	27	21	38
CO	14	12	19	12	15	24
EC	44	40	57	42	51	68
ES	38	23	31	37	24	34
JA	11	3	25	8	6	30
NI	31	30	47	32	36	48
PN	23	28	46	23	38	52
PR	71	27	46	67	33	52
PE	26	40	27	26	25	44

%Persons with perceived health needs as a share of total population (1997-1999 MECOVI) Richest Quintile

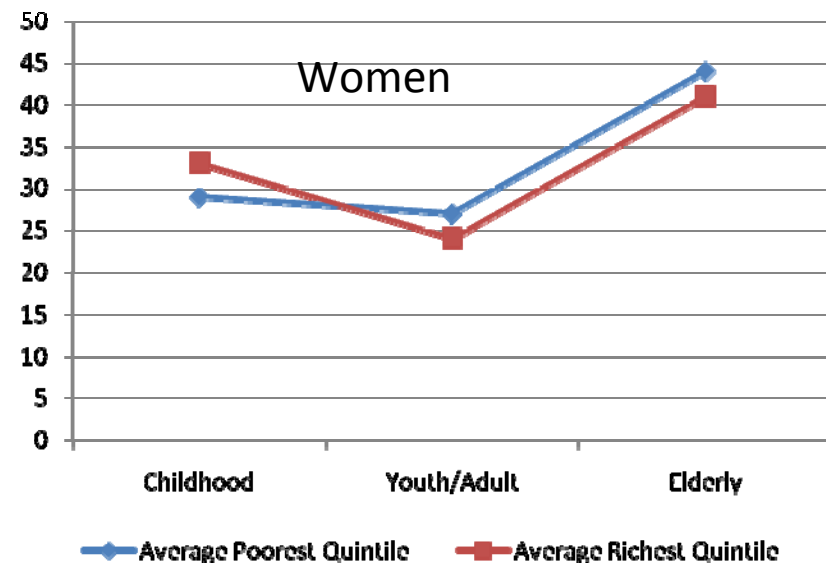
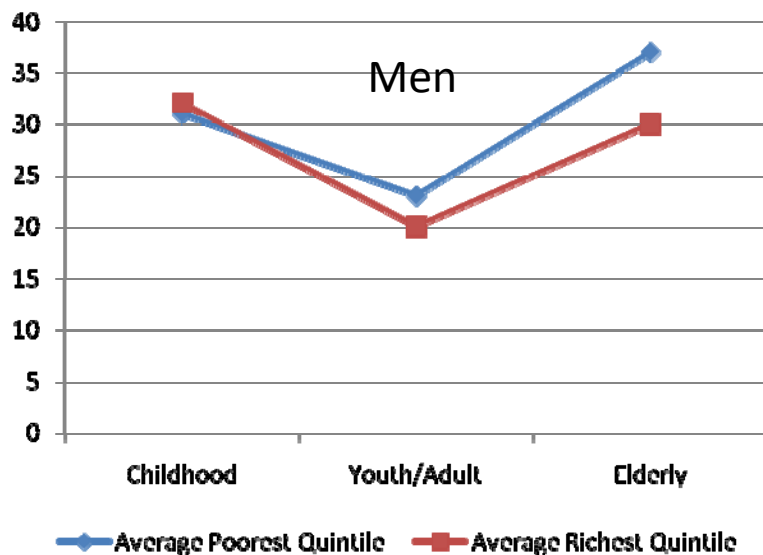
	Men			Women		
	Childhood	Youth/Adult	Elderly	Childhood	Youth/Adult	Elderly
AR	38	18	27	32	21	44
BO	7	12	43	16	12	48
BR	35	17	19	29	17	31
CH	31	16	25	29	21	43
CO	18	20	31	22	21	35
EC	43	35	47	48	46	60
ES	42	19	26	42	22	32
JA	16	6	20	15	8	33
NI	30	29	46	37	34	63
PN	35	25	29	39	39	42
PR	64	22	23	57	28	36
PE	27	22	26	28	22	30

Population with perceived health needs in LAC as a percentage of total population (1997-1999)



Population with perceived health needs in LAC as a percentage of total population (1997-1999)

Persons that declared health problems as a percentage of the population
Average of 12 LAC countries 1997-1999



Parents have a great role on the identification of their children's health needs
Poor families need assistance from health services (visitors, family doctors) to assist them on that
Programs like the PSF in Brazil could increase the perception of children's health needs in poor families

Health services utilization in LAC countries (late nineties)

1. Health utilization is presented as a share of perceived health needs
2. Health utilization according to age groups
 Childhood – 16% (PR) to 94% (AR)
 Youth/Adult – 23% (ES, PR, PE) to 87% (CO)
 Elderly – 26% (PE) to 92% (CO)
3. Health utilization by age has similar patterns than perceived health needs
4. In average, the percentage of health utilization (as a share of the perceived health needs) is much higher for the richest quintile.
5. Part of health care demand in LAC was not attended in the late nineties, specially for the poor.

Percentage of persons who received health care among those who were reported as having had a health problem or an accident (1997-1999 MECOVI DATA) – Poorest quintile

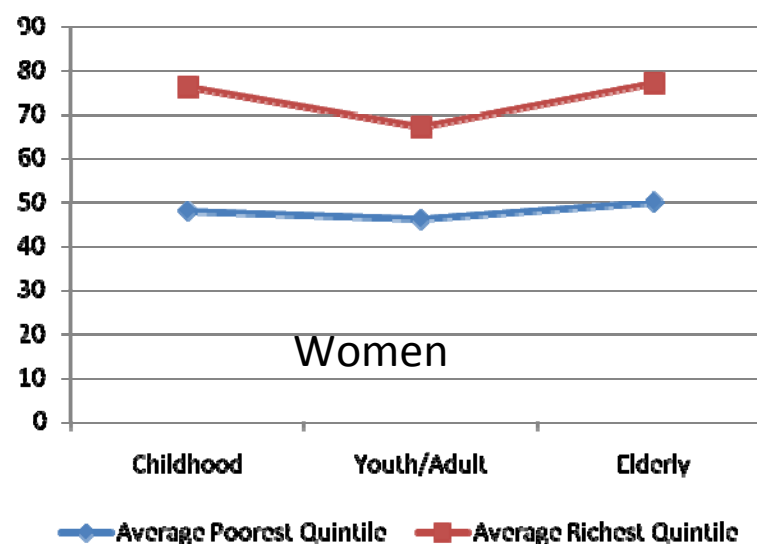
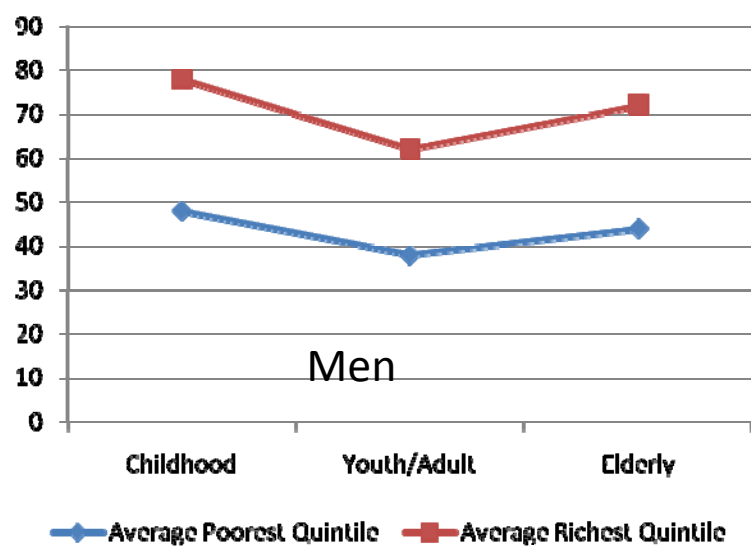
	Men			Women		
	Childhood	Youth/Adult	Elderly	Childhood	Youth/Adult	Elderly
AR	88	60	71	89	71	83
BO	26	29	27	25	38	28
BR	86	44	45	88	54	48
CH	80	59	74	80	70	77
CO	51	56	57	57	73	69
EC	31	29	36	23	31	37
ES	48	23	26	49	32	35
JA	64	57	54	53	61	63
NI	21	22	34	18	29	34
PN	34	33	36	41	38	52
PR	16	23	32	19	31	43
PE	35	23	36	29	26	26

Percentage of persons who received health care among those who were reported as having had a health problem or an accident (1997-1998 MECOVI data),- richest quintile

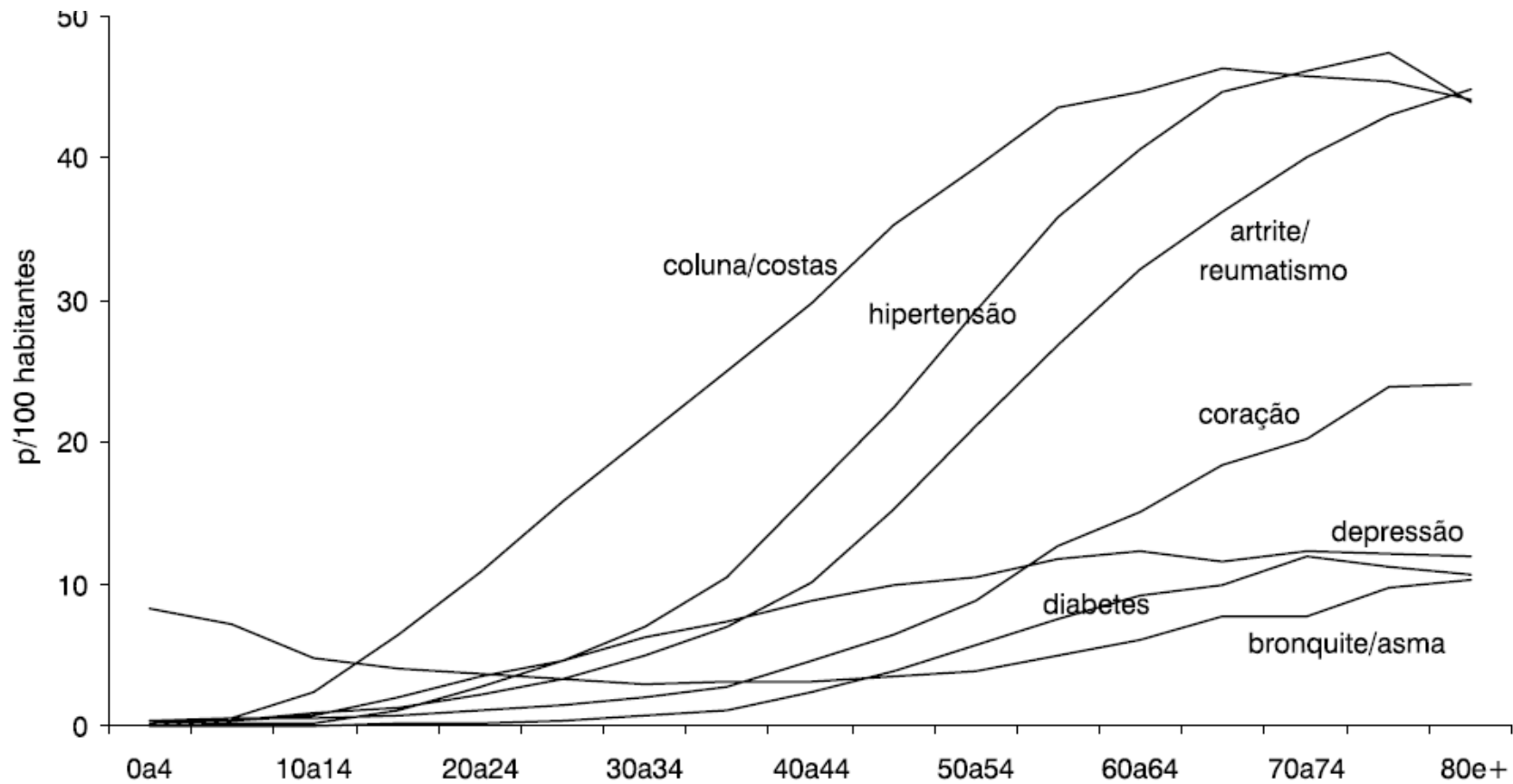
	Men			Women		
	Childhood	Youth/Adult	Elderly	Childhood	Youth/Adult	Elderly
AR	87	65	87	94	83	87
BO	62	82	76	75	86	72
BR	93	79	81	93	67	75
CH	84	79	90	87	79	86
CO	90	81	90	89	87	92
EC	64	51	64	60	51	69
ES	87	53	72	86	61	74
JA	91	52	62	77	62	78
NI	55	49	49	51	50	54
PN	72	55	61	67	61	80
PR	72	65	67	74	66	87
PE	81	34	66	66	45	64

Health services utilization as a percentage of the population declaring health problems – Average of 12 LAC countries (1997-1999)

Persons attended by health services as a percentage of the population that declared health problems - Average of 12 LAC countries 1997-1999



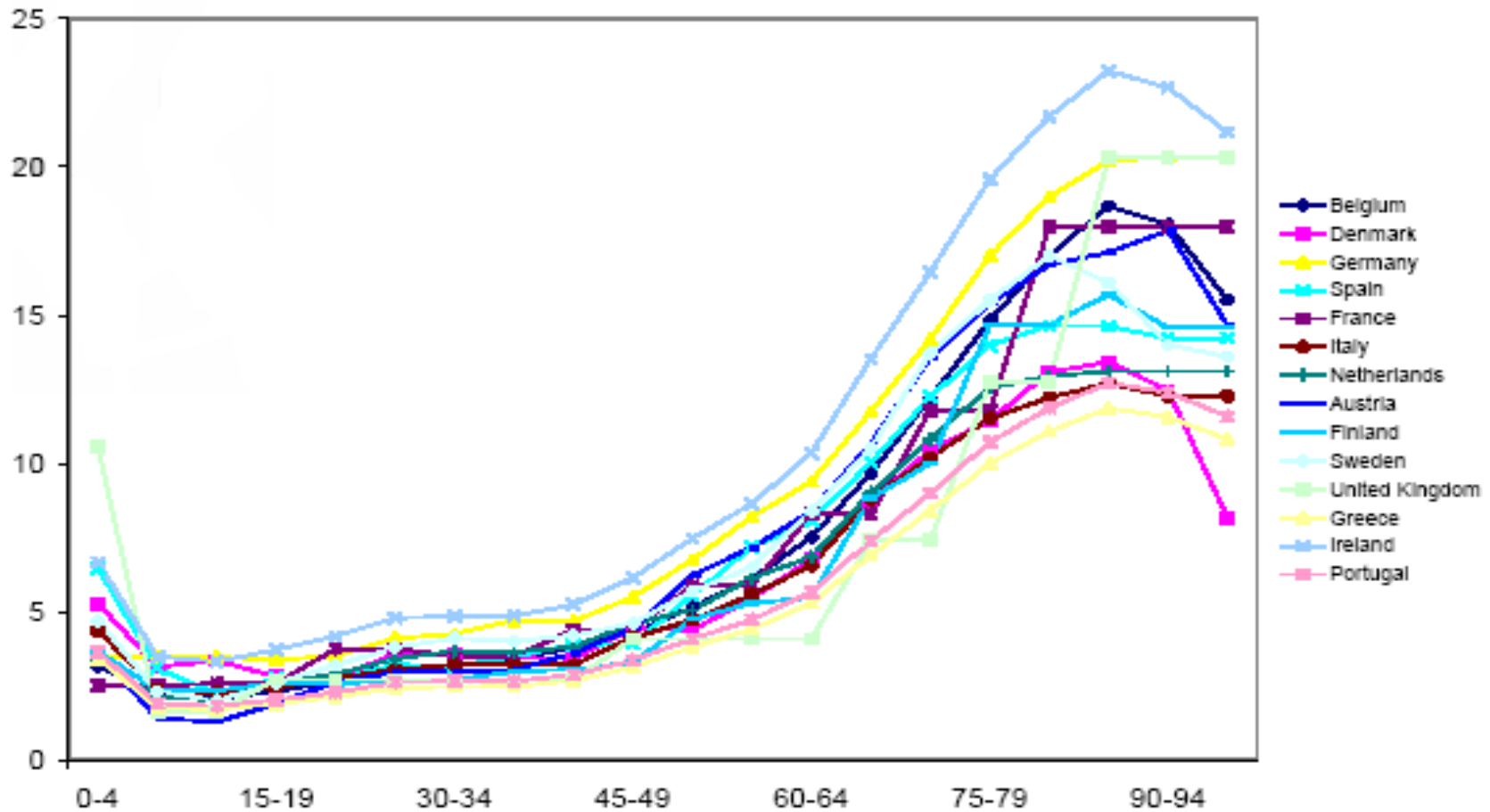
Declared incidence (p 100 inhabitants) of chronic diseases in Brazil by age groups (PNAD – Health Supplement 1998)



Health Utilization and Costs

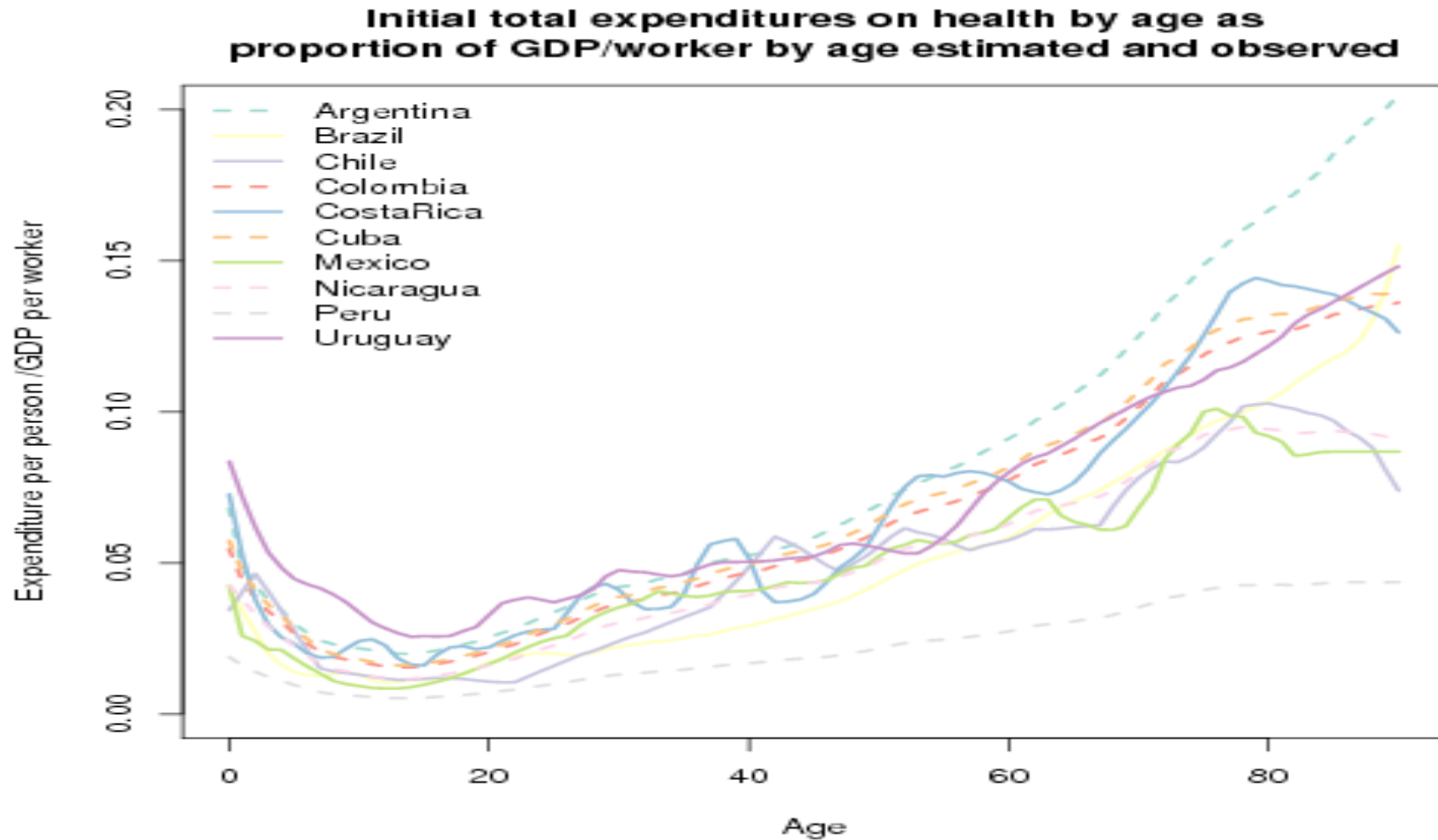
- Health costs by age are difficult information to find at aggregated level.
- Health care benefit levels are much higher for the elderly than they are for the young, continuing to let benefit levels grow as a country ages will accelerate the increase in healthcare spending.
- There are few studies in LAC but most of them partial and incomplete.
- Some studies could be found on costs of hospitalization. We will use some examples from Uruguay and Brazil

The aging effect: health per-capita expenditures by age groups as a share of the GDP per-capita in OECD Countries - 2005



Source: Bjoneroud and Martins, (2005)

Comparing with Latin America in 2005...

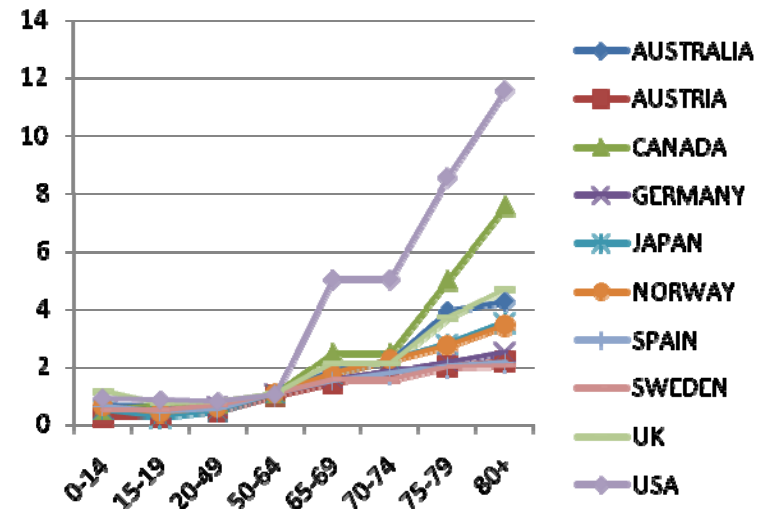


Tim Miller, CELADE (2009)

International Evidence of rising costs according age

- Kotlikoff and Hagist (2005) published a study comparing health care costs in 10 OECD Countries;
- The paper assume that the age specific health spending is constant through time and normalize age profile of average expenditures by dividing by average expenditures of age group 50-64.
- The study could show some evidences of the impact of aging in health costs in developed countries

Health Care Benefit-Age Profiles

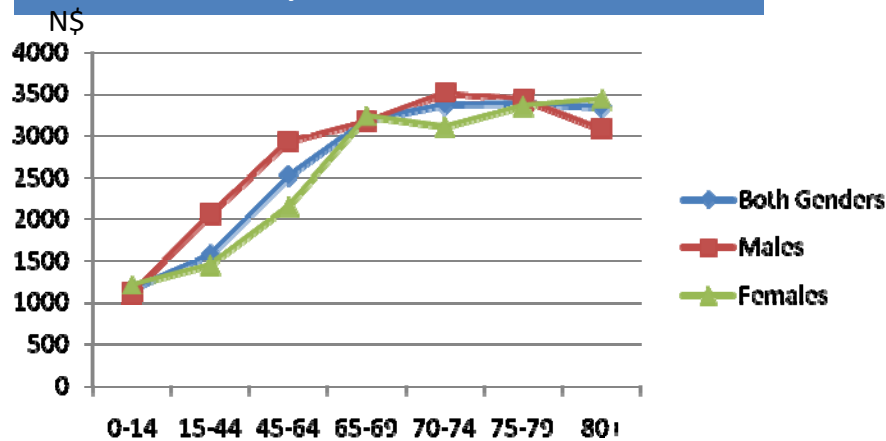


	0-14	15-19	20-49	50-64	65-69	70-74	75-79	80+
AUSTRALIA	0,6	0,57	0,64	1	1,81	2,16	3,9	4,23
AUSTRIA	0,28	0,28	0,46	1	1,42	1,75	1,98	2,17
CANADA	0,43	0,61	0,65	1	2,45	2,44	4,97	7,54
GERMANY	0,48	0,43	0,58	1	1,52	1,8	2,11	2,48
JAPAN	0,44	0,22	0,43	1	1,7	2,2	2,76	3,53
NORWAY	0,57	0,34	0,52	1	1,7	2,21	2,69	3,41
SPAIN	0,57	0,39	0,48	1	1,46	1,73	1,97	2,11
SWEDEN	0,43	0,43	0,63	1	1,5	1,5	1,96	1,99
UK	1,08	0,65	0,76	1	2,07	2,07	3,67	4,65
USA	0,88	0,82	0,77	1	5,01	5,02	8,52	11,53

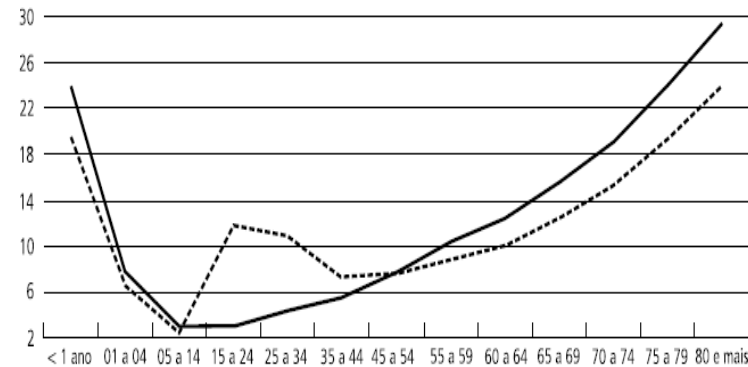
Some evidence for Latin America

1. Health costs by age have the similar pattern.
2. Even with higher utilization in the reproductive age, average women costs are lower than men hospital costs
3. Women hospital costs are higher after 80 due long life span
4. Average male health costs decline after 70-74 group in Uruguay and 60-64 in Brazil

URUGUAY – Average Hospital Costs by Age and Gender – CASMU System - 1991



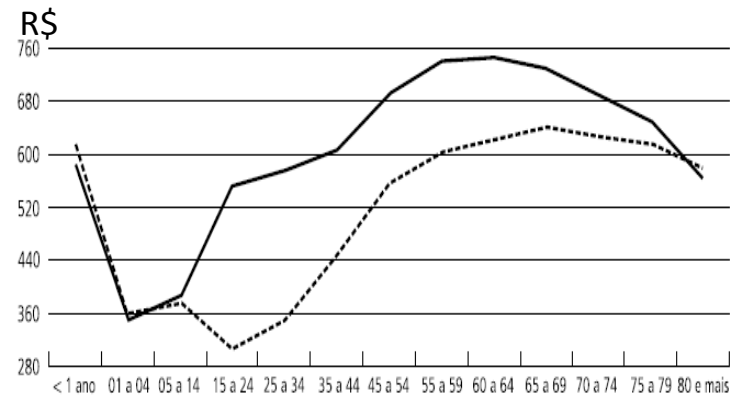
BRAZIL SUS utilization rates by gender and age - 2003



Source: DATASUS

— Homens - - - - Mulheres

Brazil: Average hospital costs in the SUS by age and gender - 2003

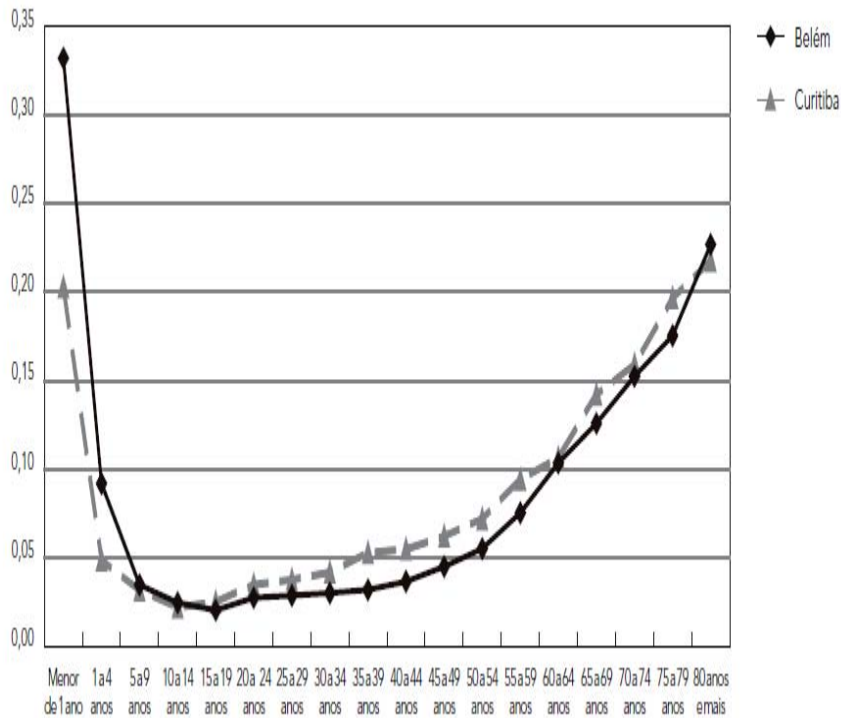


Source: DATASUS

— Homens - - - - Mulheres

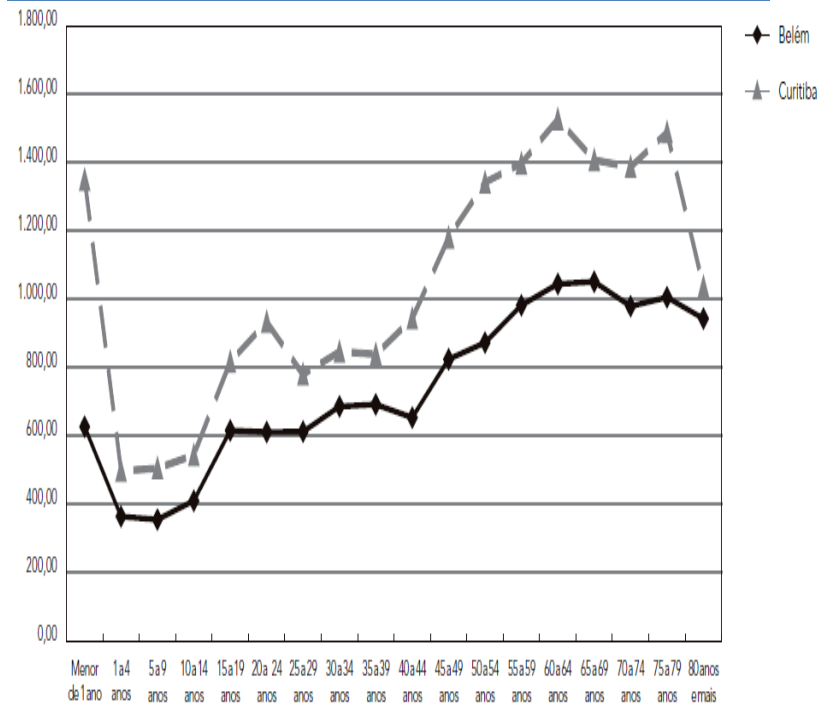
Men Impatient rates and correspondent costs (Brazil 2005)

BRAZIL SUS – Men's impatient rates by age in two metropolitan regions (2005)



Population aging effects on inpatient care expenditures: a disaggregated analysis for two Brazilian metropolitan areas

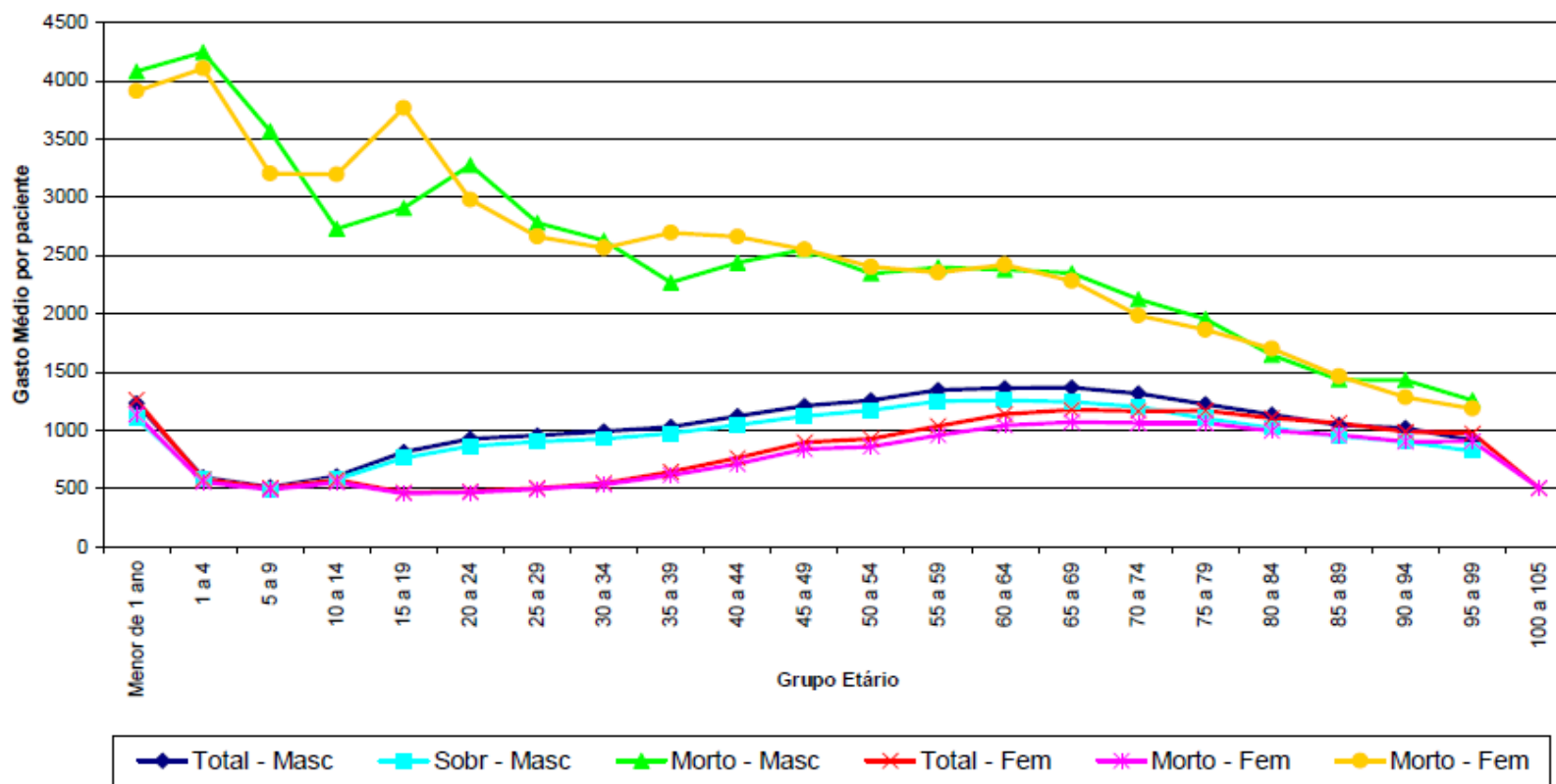
BRAZIL SUS – (2005) – Per-capita impatient expenditures (in R\$) by age in two metropolitan region (2005)



Berenstein CK, Wajnman S

Cad. Saúde Pública, Rio de Janeiro, 24(10):2301-2313, out, 2008

Health costs per patient according life status (dead or survival) by age (Brazil Minas Gerais State 2005)



Cláudia Koeppl Berenstein♦
 Roberto Nascimento♦
 Carla Jorge Machado†

September 2008

Source AIH

Data problems

- Information about health costs is fragmented and difficult to integrate
- In LAC, household surveys or family budget surveys could present information about out-of-pocket health expenditures by age (but not costs)
- Most health public accounting information systems does not use age as a variable to inform payment for procedures or costs in public owned hospitals;
- The best way is to use and validate public and private health costs (in existing health IT systems that have information by age) to estimate aggregated health costs by age and make projections in order to evaluate future impacts in public budgets of private expenditures.

Policy Implications

- How to better spend in health?
 - Changing culture - Promotion, prevention,
 - Reduce transaction and administrative costs;
 - Realign incentives to health insurers and providers
- How to better assure health in elderly?
 - Public - Basic universalism in health;
 - Private – Public regulation of health plans to correct market failures and inequities;
 - Complementary health based on medical savings accounts;