

Health status and out-of-pocket  
spending during the last year of life  
in Mexican population 60+

REVES 30

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# Background and questions about MX

- During the last year of life (LYL) in elderly population health conditions worsen, medical expenses increase, more care is required
- Key determinants for health status and medical costs are:
  - prime cause of death, • kind of access to health care
- Which are the conditions and parameters of the LYL in the elderly Mexican population?

# Data and objectives

- MHAS panel data
- Sociodemographic issues and health status affecting medical care expenses during the LYL
- Differences in out-of-pocket (O-P) spending between the LYL and same age survivors past year

Regional differences  
Health care system

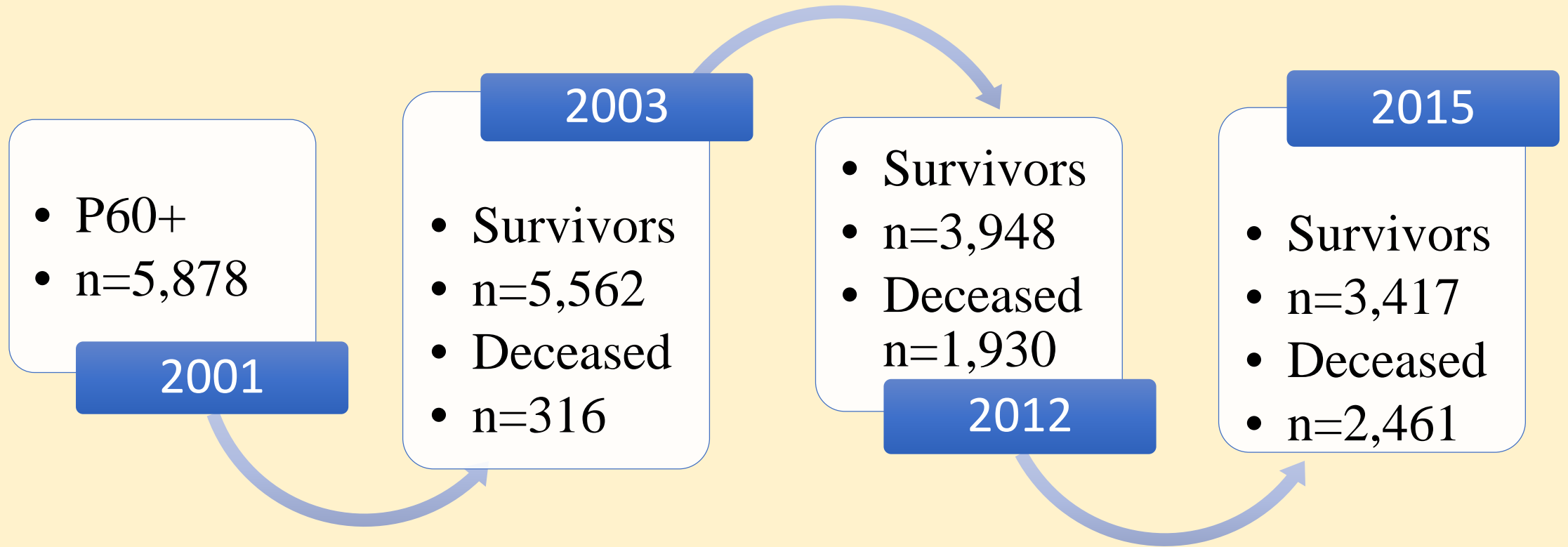
SES  
Health conditions

Comparing O-P expenses from $t_0$ to $t_1$	
Survivors and deceased	None in both dates
	From none to O-P expenses
	O-P expenses in both dates
	From O-P expenses to none
O-P expenses in LYL	
None	
Low and medium (1 to 23,999)	
High (24,000 and over)	

Variable		Values
Sociodemographic	Age bracket	0) 60 -69 1) 70-79 2) 80-89 3) 90+
	Sex	0) Men 1) Women
	Education	0) <6 years 1) >7 & <11 years 2) >12 years
	Survival	0) Survivor 1) Deceased
	Marital status	0) Single 1) Partner
	Place of residence	0) Lesss urban 1) Urban
	Health status	Number of self-reported ailments
Functional limitation		0) None 1) With
Number of functional limitations		0) 0 1) 1 2) 2 3) 3
Health system		Affiliation

Health care access	Place of death	0) Home 1) Hospital
Health	Prime cause of death	0) Cancer 1) Diabetes 2) Heart 3) Stroke 4) Infection 5) Otra

# Trajectories with complete data



P60+ distribution by health provider agency, comparing INEGI and MHAS

Health System	2000-2001		2015	
	INEGI	MHAS	INEGI	MHAS
	(%)	(%)	(%)	(%)
IMSS	37.4	37.5	43.8	33.6
ISSSTE	8.7	10.8	12.4	12.6
Seguro Popular	-	-	41.0	37.1
PEMEX	1.5	2.5	1.7	2.9
Private insurance	-	2.3	2.8	2.8
Other	1.0	2.0	1.4	1.2
None	57.0	44.7	13.1	9.5
P60+	6,948,457	7,952,328	12,436,321	12,772,990



# Descriptive Statistics

## 1. Sex

	t0	t1		t1 (%)	
		Survivors	Deceased	Survivors	Deceased
Men	2538	1462	1077	42.79	43.76
Women	3340	1955	1384	57.21	56.24
Total	5878	3417	2461	100	100

## 2. About O-P expenses

O-P expenses	Cases		(%)	
	Survivors	Deceased	Survivors	Deceased
None	2,018	1021	59.06	41.49
From none to yes	590	690	17.27	28.04
Always	397	429	11.62	17.43
From yes to none	412	321	12.06	13.04
Total	3,417	2461	100	100

## 3. Distribution of cases by O-P expenses in LYL

	n	(%)
None	515	21.0
Low-Medium	396	16.0
High	1,550	63.0
Total	2,461	100

#### 4. Sociodemographic by O-P expenses in the LYL

Variables	None	Low-Medium	High	Total
Women_t0	0.52	0.60	0.57	0.56
Women_t1	0.52	0.61	0.57	0.56
Age_t0	76.38	77.96	78.62	78.04
Age_t1	79.74	81.47	81.99	81.43
Education	3.45	2.60	2.77	2.88
Urban_t0	0.75	0.64	0.58	0.62
Urban_t1	0.80	0.69	0.63	0.67
Marital status_t0	0.49	0.39	0.38	0.40
Marital status_t1	0.41	0.33	0.36	0.37
Place of death:				
House	0.37	0.45	0.67	0.57

#### 5. Diseases and ADL's limitations by O-P expenses in the LYL

Variables	None	Low-Medium	High	Total
Num. of diseases_t0	1.10	1.09	1.00	1.03
Núm. of diseases_t1	2.52	2.57	2.61	2.58
Num. of limitations_t0	1.78	1.87	2.00	1.93
Limitationss_t0	0.51	0.54	0.54	0.54
Limitations_t1	0.81	0.79	0.75	0.77

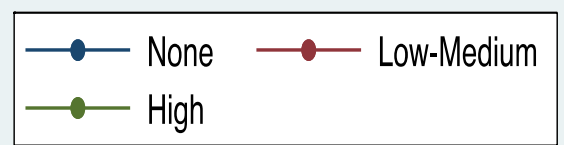
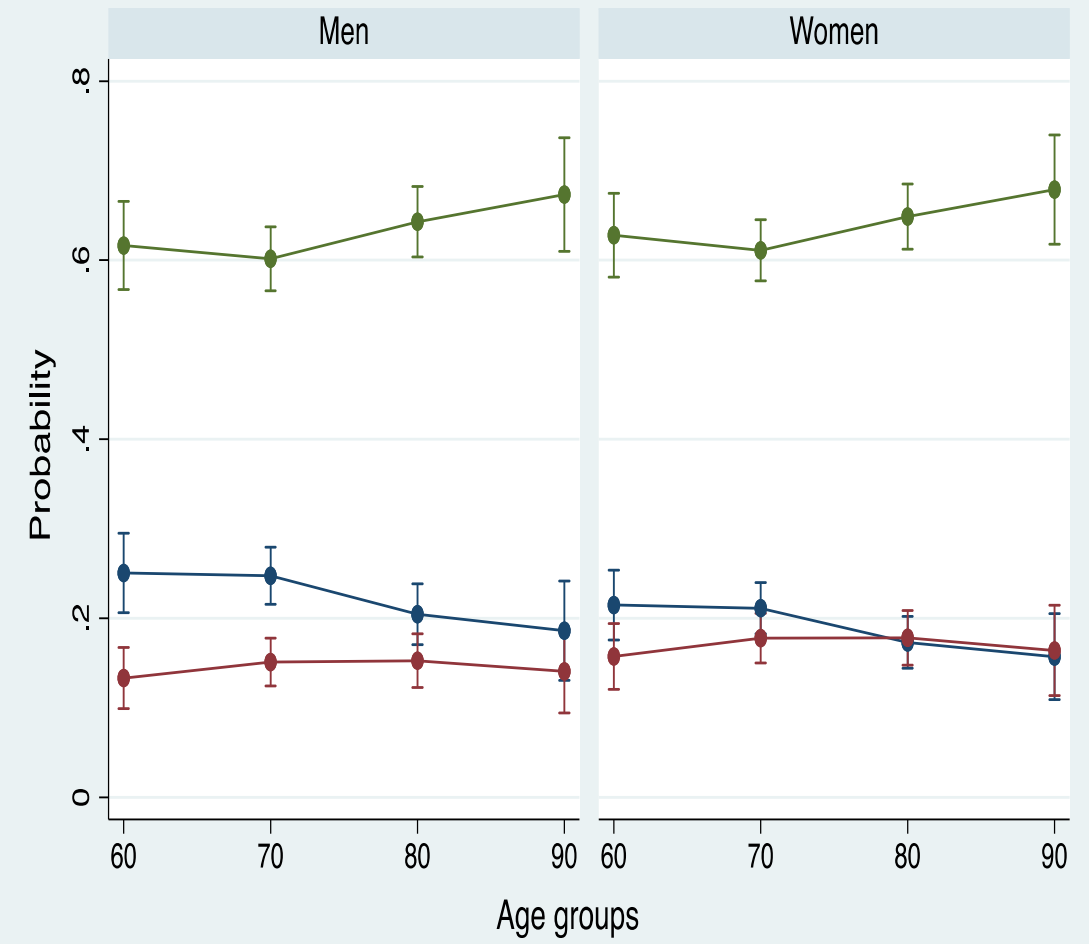
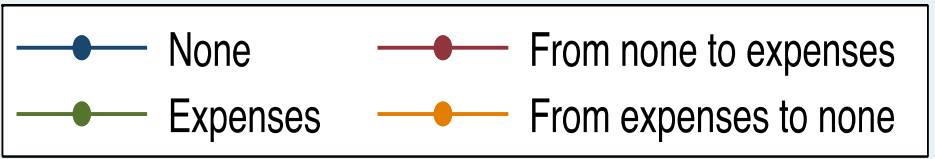
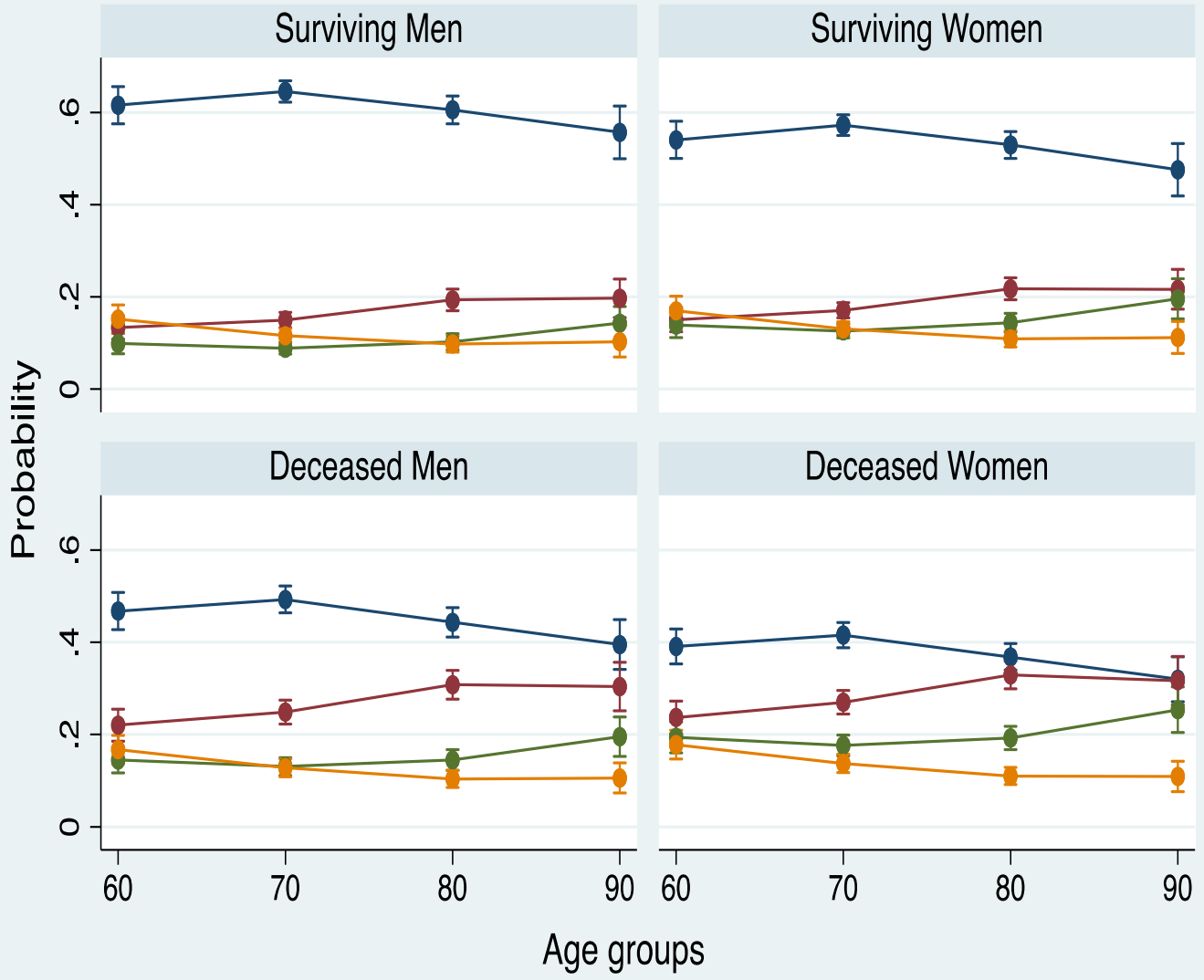
## 6. Cause of death by O-P expenses in the LYL

Causa de muerte	n			(%)		
	None	Low-Medium	High	None	Low-Medium	High
Infection	8	7	9	33.3	29.2	37.5
Cancer	89	49	202	26.2	14.4	59.4
Diabetes	97	65	168	29.4	19.7	50.9
Stroke	27	26	81	20.1	19.4	60.4
Heart	80	57	312	17.8	12.7	69.5
Total	301	204	772	23.6	16.0	60.5

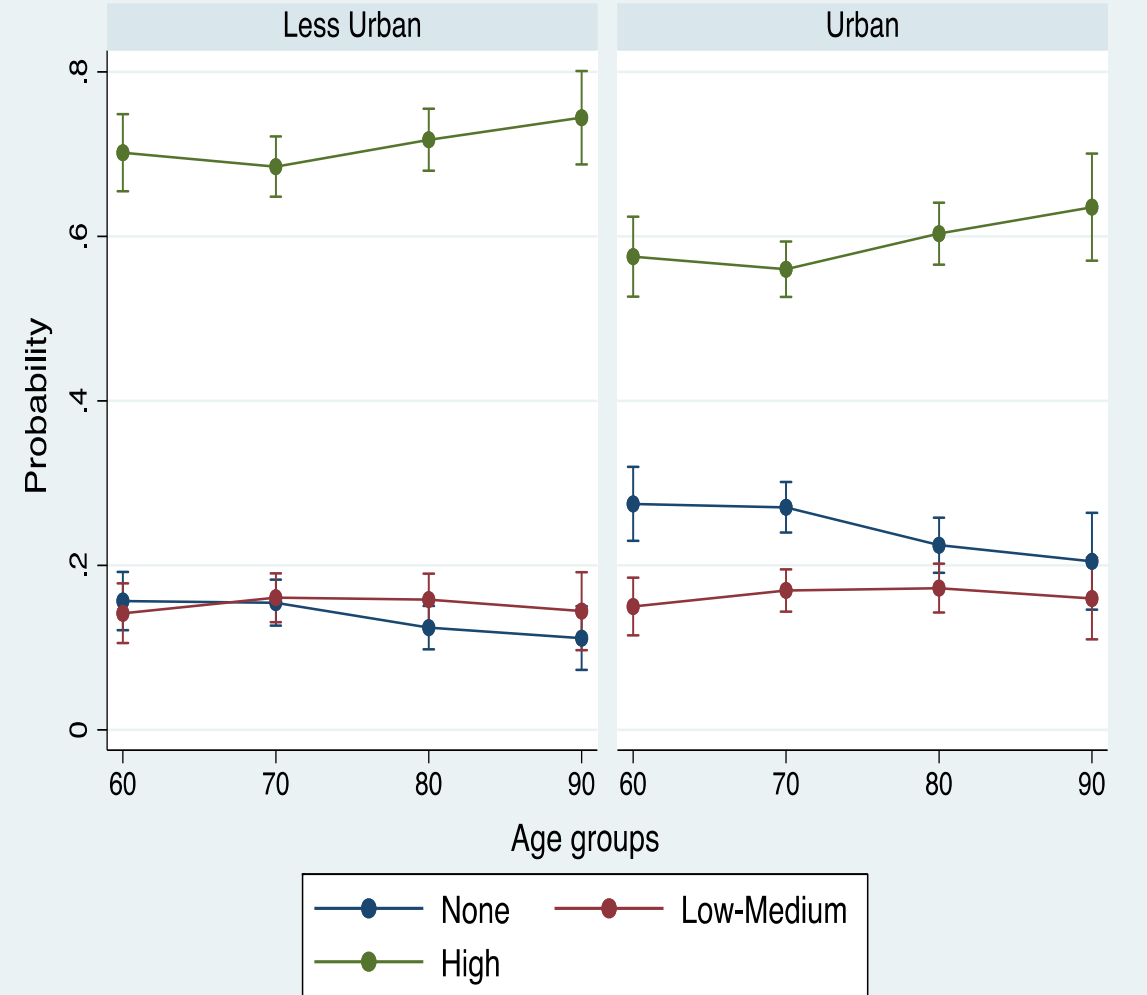
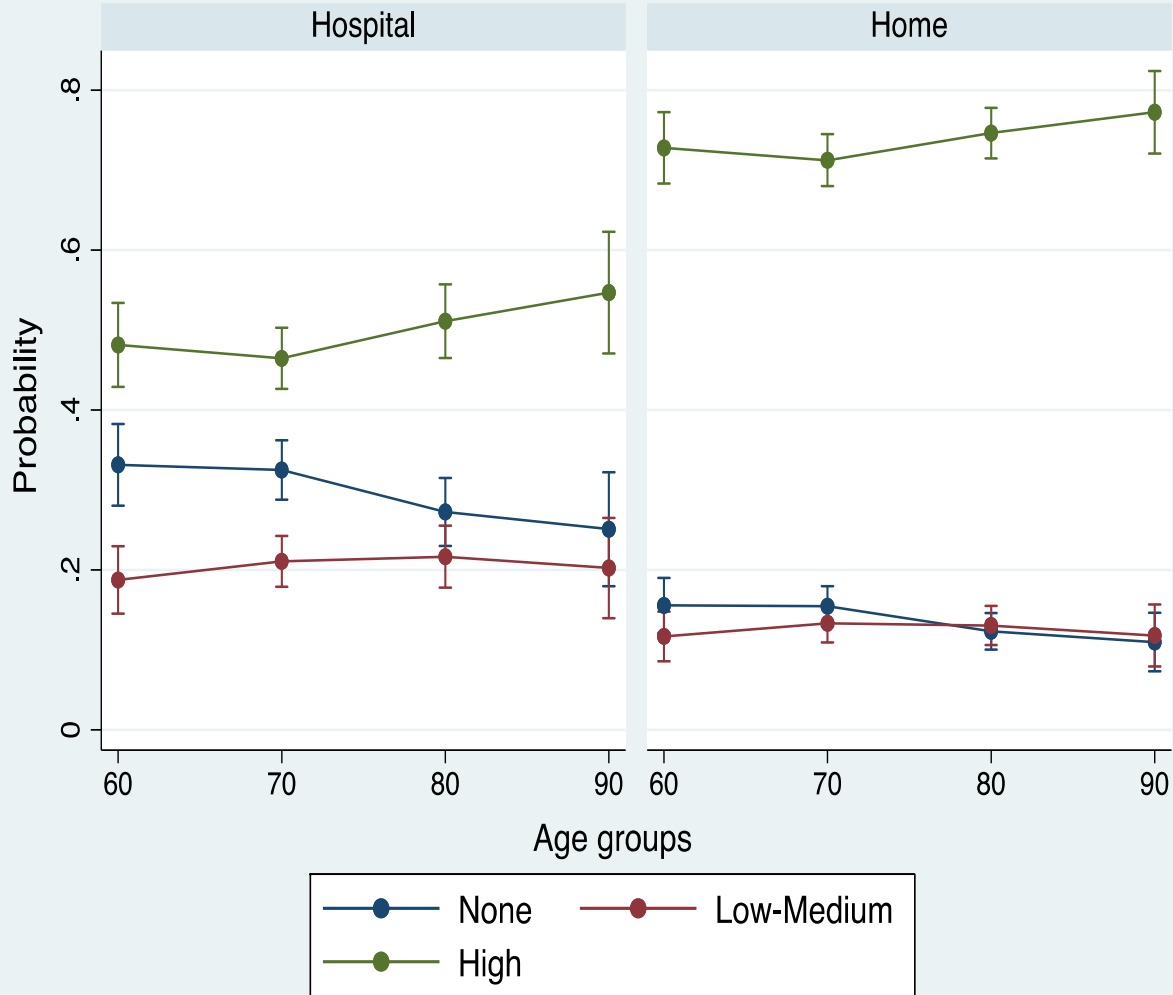
## 7. Health acces by O-P expenses in the LYL

	t0			t1		
	None	Low-Medium	High	None	Low-Medium	High
None	5.2	14.9	79.7	0.3	9.2	90.4
Social Security	30.4	16.4	53.1	31.1	15.9	52.9
Private Insurance	36.0	13.3	50.6	20.9	11.4	67.5
Seguro Popular	9.5	22.7	67.6	6.7	23.1	70.0
Other	19.5	12.6	67.8	8.4	17.8	73.6
Total	20.9	16.1	62.97	21.5	15.9	62.4

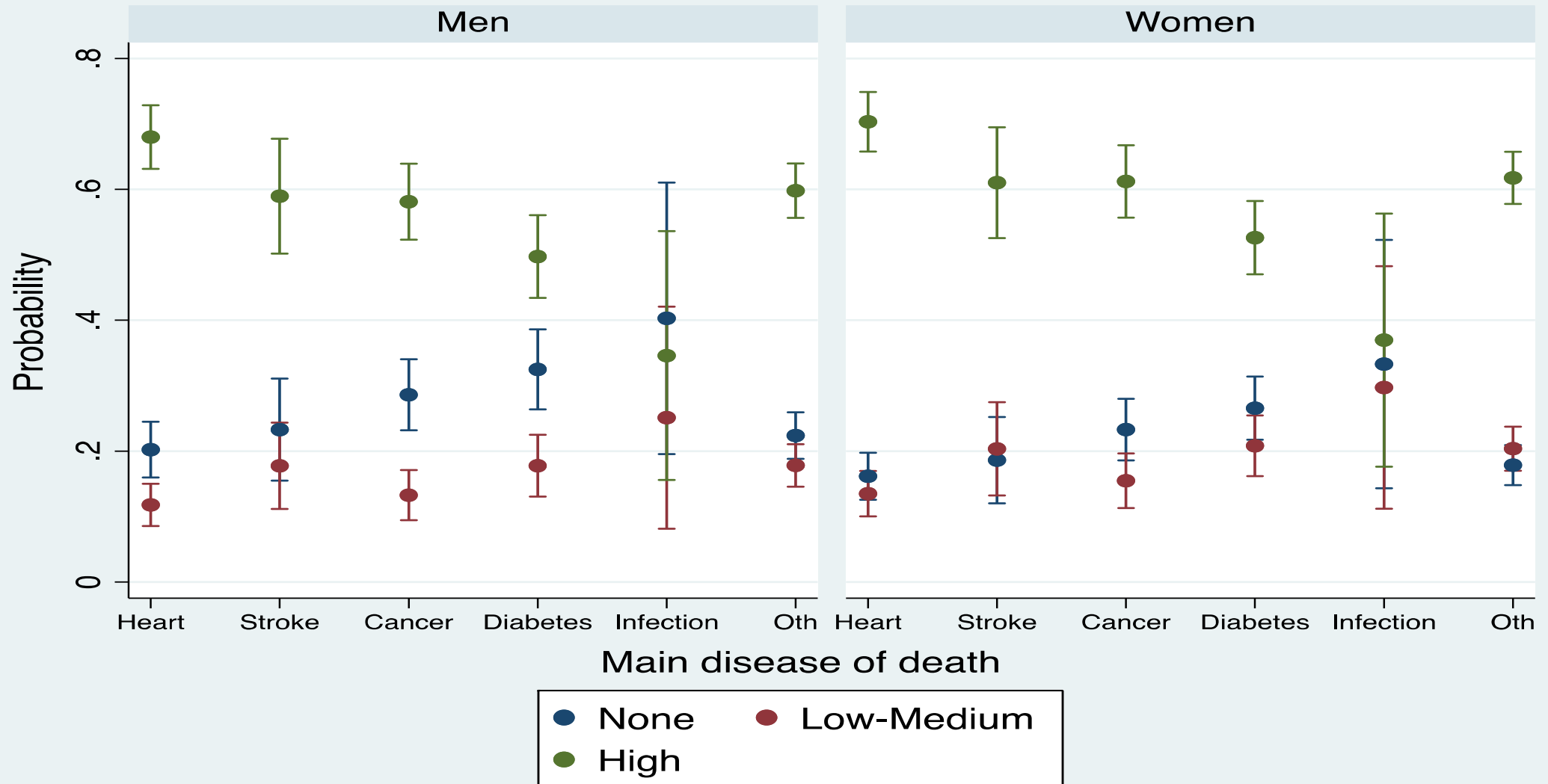
# Sex and age



# Place of death



# Main cause of death



# Health system access

