NEEDS AND LONG TERM CARE FOR OLDER PEOPLE IN SPAIN: DOES REGION MATTER?

Maria Ángeles Tortosa, Dolores Puga & Gerdt Sundström

VNIVERSITAT ⚕ ɪᴅ VALÈNCIA

CSIC
CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS

SCHOOL OF HEALTH SCIENCES
JÖNKÖPING UNIVERSITY

Introduction

- Spanish services for older persons much improved (1975-2016) – like elsewhere family provides most care.

- Public(ly financed), universal *and* mean-tested LTC since Dependency Law in 2007: similar to care insurance.

- Central government delegates to regions and municipalities to manage services: Different provision among regions.

- Long waiting list to enter and receive LTC: 384.00 persons in 2016.

- Stable spending on services and benefits: 0.6 – 0.7 % of GDP (2011-2015). After crisis more copayments

Spanish LTC number of users trend, 1999-2013

— Nº users Home Help — Nº users nursing homes — Nº users day center — Nº users telealarm
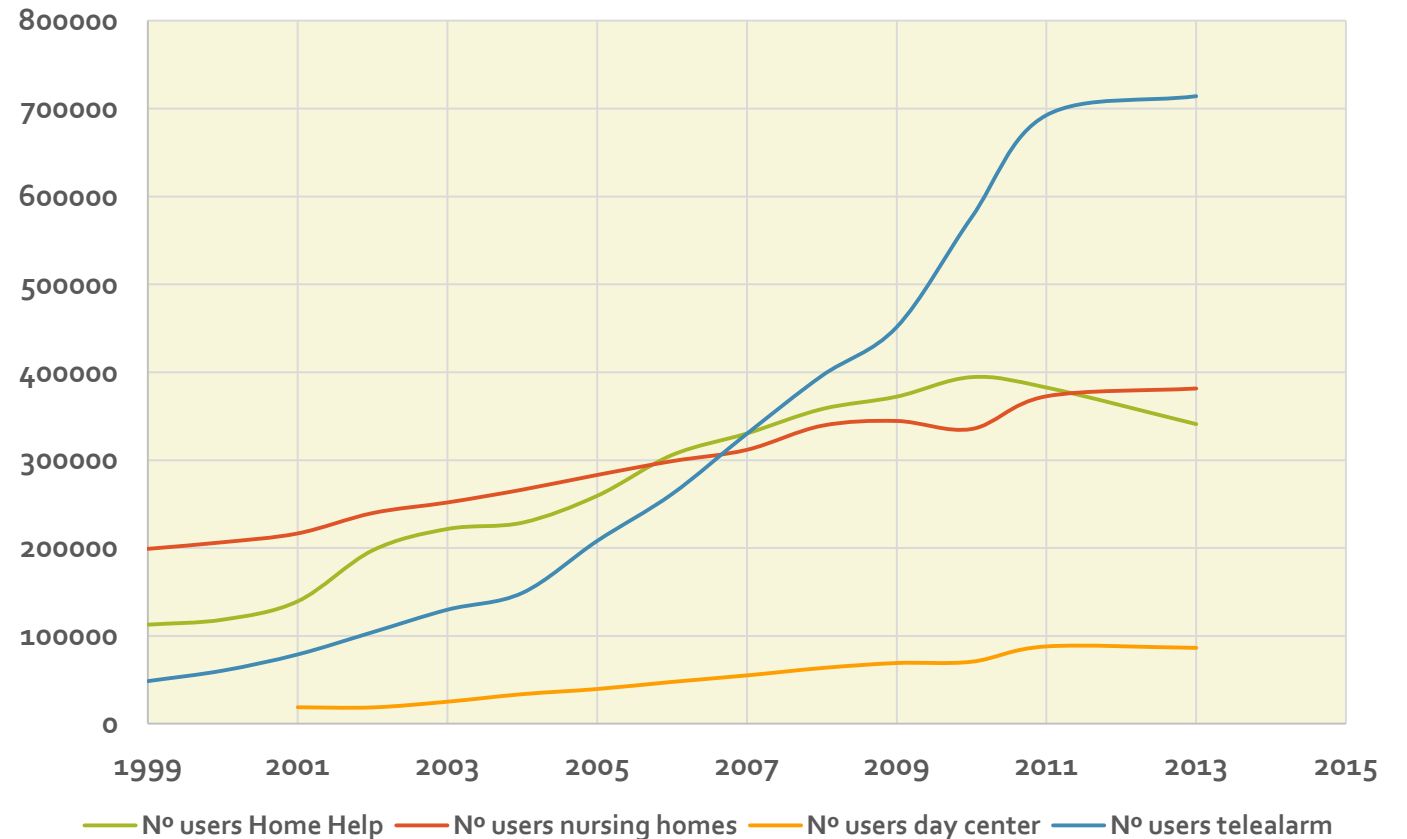
* Publicl and private supply
Source: various IMSERSO reports

Aims

- Does (potential) service responses vary between the 17 Spanish regions?
- Are regional service variations simply a response to local differences in need of the population?
- Do regions target different clients, for example the frailest or those who live alone?

We strive to discern regional LTC "models", based on their coverage and diversification of services

Methodology

Multilevel design: regional *and* individual level
Year: 2008, the first year of implementation of Spanish Dependency System
Sources:
   a) level region: IMSERSO, Senior Report 2008; Statistical information Dependency System,
    December 2008.
   b) individual level: INE, Survey on Disability, Independence and Dependency (EDAD 2008), 45,553
individuals aged 65+ years living in the community

Method:
   1) regional classification
   2) descriptive analysis
   3) binomial and multinomial logistic regression. Independent variables: socio-demographic (gender,
age, living arrangements, education, social network, self-rated health, disabilities), comorbidities, use
of health care, proxies of wealth and poverty, accessibility barriers, residence, region
   4) regressions, all and by gender

Services: Home Help, tele-alarm systems, transportation service, meals-on-wheels, laundry-service,
technical adaptations, economic benefits, respite services, day centers/day care

Results: Classification of Spanish regions by coverage and diversification of social services for older people
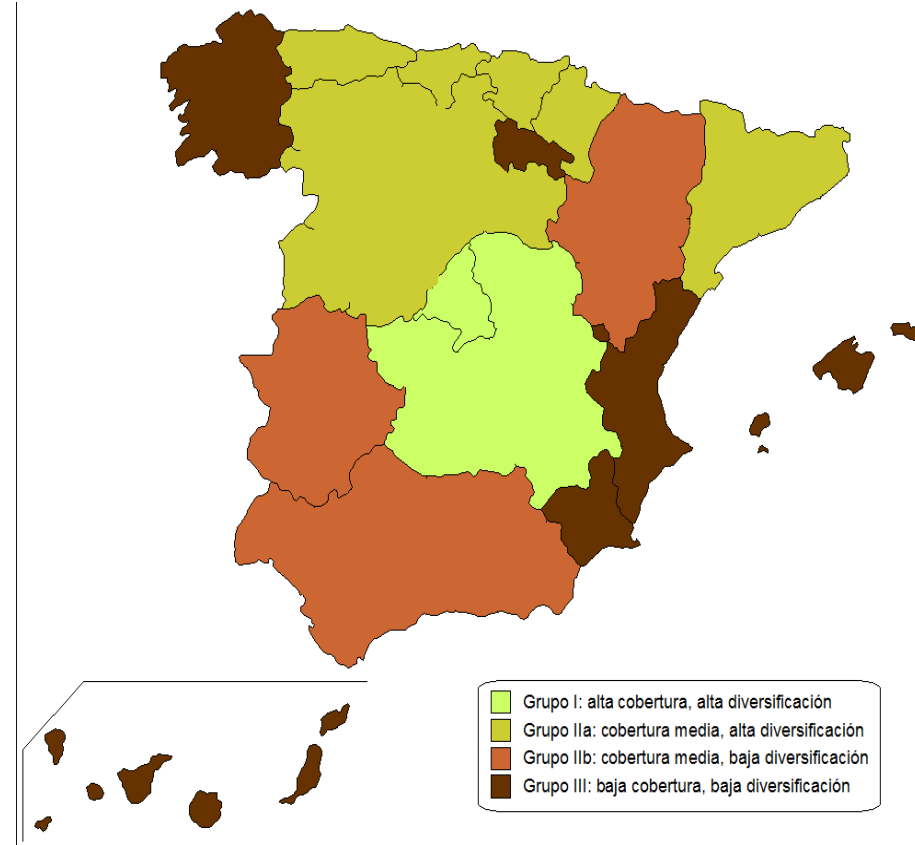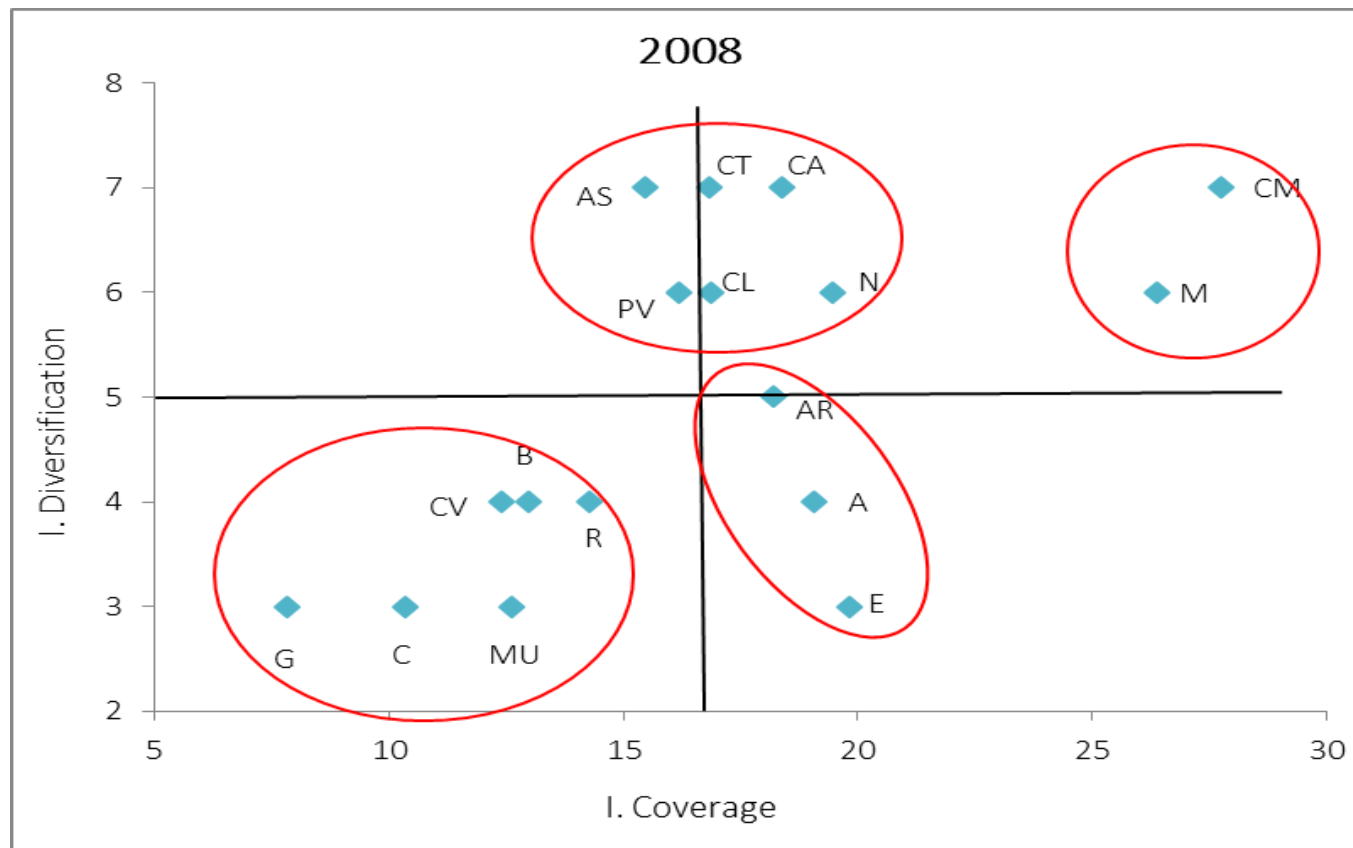
Source: Informe Mayores 2008, Información Estadística del SAAD, diciembre 2008.
Note: A (Andalucía), AR (Aragón), AS (Asturias), B (Baleares), C (Canarias), CA (Cantabria), CL (Castilla-León), CM (Castilla- La Mancha), CT (Cataluña), CV (C. Valenciana), E (Extremadura), G (Galicia), M (Madrid), MU (Murcia), N (Navarra), PV (P. Vasco), R (La Rioja)
Foot note: Coverage = cumulative percentage of service provision for the 65+, Diversification = a minimum level of coverage, at least from the 20th percentile

Results: Characteristics of regions and of older people in the EDAD survey 2008, by group of regions. Spain 2008

	Population density	% 65+	% 80+	% 65+who live alone	% 65+ in multigenerational households	% need ADL help	% 65+live alone & need ADL help
Group I	95,0	15,1	4,3	23,4	6,2	22,1	5,4
Group IIa	89,8	18,2	5,4	22,8	6,5	21,4	4,5
Group IIb	60,1	15,7	4,1	22,5	7,5	26,3	5,7
Group III	123,1	17,8	4,9	18,7	9,9	23,7	5,0

Notes: Population density (inhab./km2); multigenerational households (live with their children and grandchildren); Any need: needs help with basic (eating, dressing, bathing, etc.) and/or instrumental activities like toileting, shopping

Over-aging and regional population density
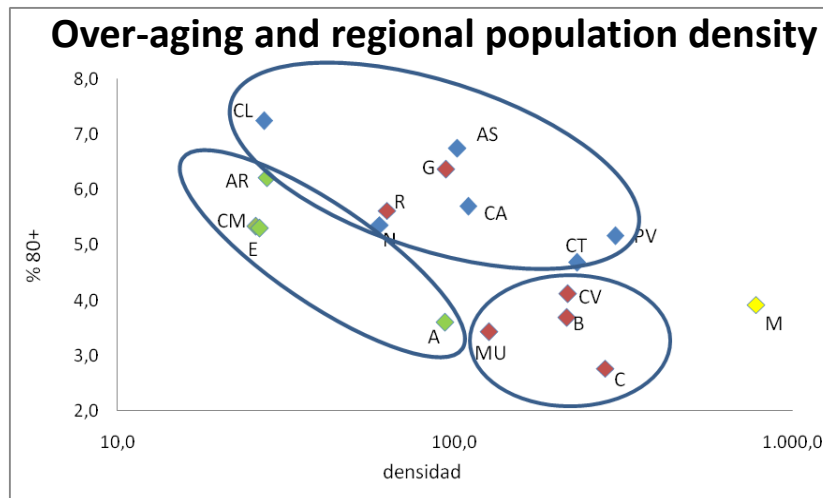
Grup I: high coverage, high diversification

Grup IIa: medium coverage, high diversification

Grup IIb: médium coverage, law diversification

Grup III: law coverage, law diversification

Older persons who need any help, by service use and number of services used, by group of regions. Per cent. Spain, 2008.

	% Home Help	% Tele alarm system	% Day center	% Transportation service	% Technical adaptations	% Financial allowance	Total	0 services	1 services	2+ services
Group I	**10,6**	**4,9**	**4,7**	**14,3**	0,7	0,3	**35,5**	**73,1**	19,8	**7,2**
Group IIa	8,6	2,7	3,7	11,8	0,2	0,3	**27,3**	**79,0**	15,9	**5,1**
Group IIb	8,7	3,4	2,4	11,0	0,2	0,1	**25,7**	**79,2**	16,5	**4,3**
Group III	7,3	2,0	2,6	14,0	0,1	0,0	**26,1**	**78,1**	18,2	**3,7**

Type of services used by those who need any help, by group of regions
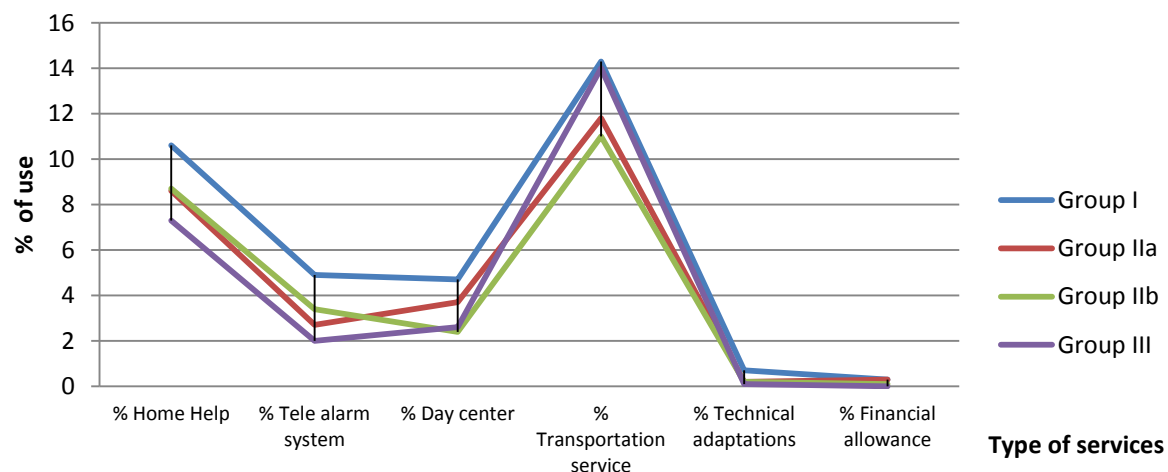
Older persons who live alone *and* need help, by service use and number of services used, by group of regions. Per cent. Spain, 2008.

	% Home Help	% Tele alarm system	% Day center	% Transportation service	% Technical adaptations	% Financial allowance	Total	0 services	1 services	2+ services
Group I	**17,1**	**9,8**	1,1	**13,1**	0,6	0,0	**41,6**	**69,0**	21,7	**9,3**
Group IIa	13,9	6,9	1,7	9,1	0,1	0,2	**32,0**	**77,1**	15,9	**7,0**
Group IIb	15,5	8,2	1,7	10,2	0,2	0,0	**35,9**	**71,4**	22,2	**6,4**
Group III	9,9	6,8	3,4	10,2	0,0	0,0	**30,2**	**75,8**	19,0	**4,6**

Type of services used by those who need any help & alone by group of region
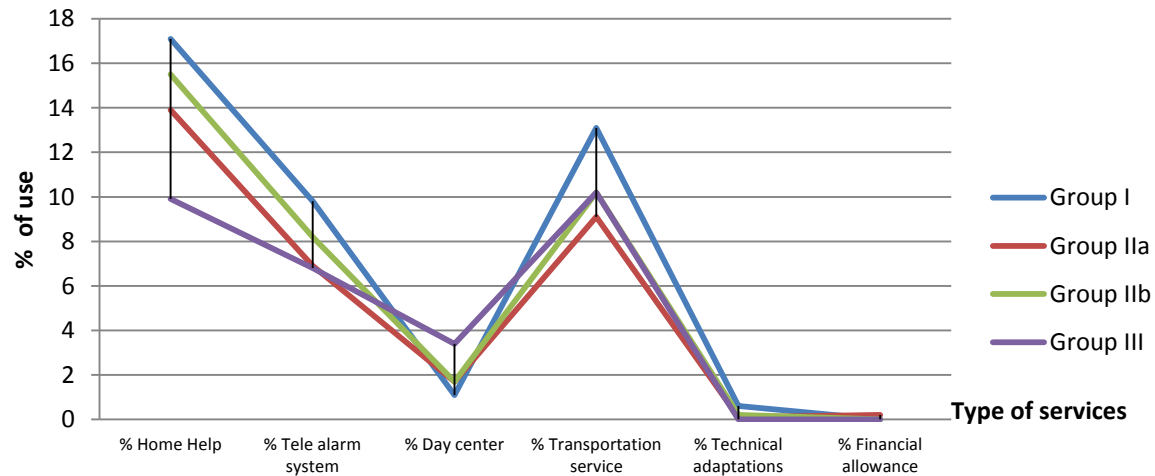
Results: Older persons who need ADL help (instrumental and personal care) by sources of help and by group of regions, Spain 2008. Per cent

	No public service	2+ services	Need help, get no help	Satisfied with help	Without help	Only informal	Only private (formal)	Only formal (public and/or private)	Informal & formal (private)	Informal & formal (public and/or private	Total informal
Region I	73	7	27	74	42	30	2	6	5	16	51
Region IIa	79	5	39	69	37	37	2	4	7	14	58
Region IIb	79	4	40	64	34	40	2	5	6	14	60
Region III	78	4	44	66	30	42	2	4	7	15	64

Need help, get no help
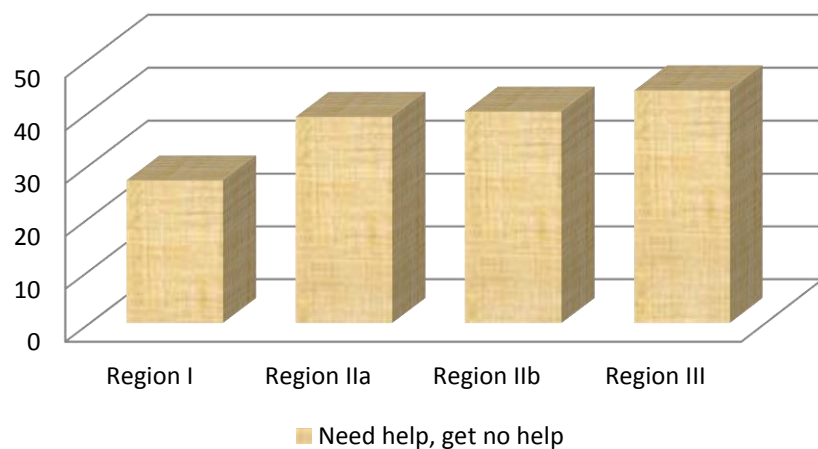
Use only of informal care among persons who need ADL help
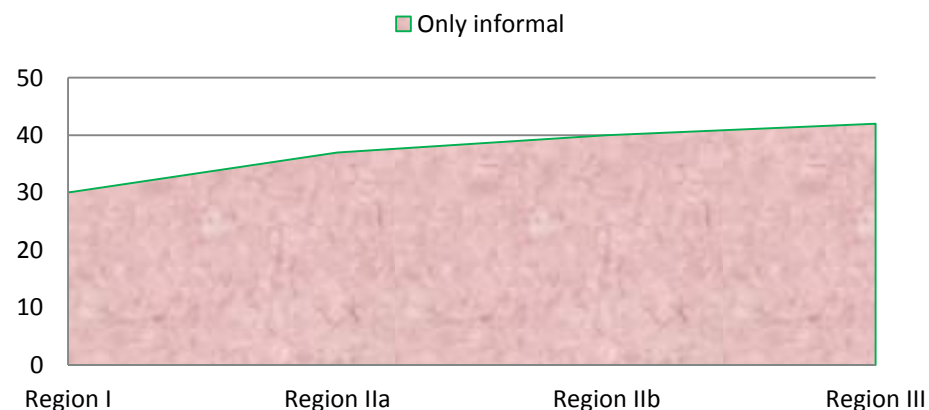
Results: Odds ratios for ANY SERVICES USED by total population

TOTAL POPULATION	Any services used		TOTAL POPULATION	Any services used	
	%	OR		%	OR
Gender			**Disability**		
(Men)	34.00	1.000	(None)	76.6	1.000
Women	66.00	**0.793****	Instrumental	6.00	**2.717****
Age			Basic	17.5	**4.303****
(65-79)	53.9	1.000	**Cronic morbidity**		
80+	46.1	1.291	(0-3)	57.1	1.000
Education level			4+	42.9	**1.601****
(Without studies or primary incomplete)	58.8	1.000	**Self-rated health**		
Primary complete	28.1	**0.780****	(Good or very good)	65.6	1.000
Secondary or superior	13.1	**0.875***	Regular, bad or very bad	34.4	**1.696****
Living arrangements			**Residence**		
(With other different than partner)	31.1	1.000	(Urban)	61.6	1.000
With partner	47.4	**0.840****	Rural	38.4	**0.864****
Alone	21.5	**1.374****	**Regional model**		
Have children near			(1: high covegare, high diversification)	16.4	1.000
(Yes)	77.2	1.000	2a: medium coverage, high diversification	31.4	**0.750****
None in same city	22.8	1,142*	2b:medium coverage, law diversification	23.9	**0.720****
Use of any health service (last 4 weeks)			3: law coverage, law diversification	28.3	**0.680****
(No)	47.5	1.000	N: 45,553		
Yes	52.5	**1.918****	** p< 0.01 * p<0.05		

Model/Odds ratios for USING ANY SERVICE by <u>group of regions</u>. Total population

TOTAL POPULATION	Any services used					TOTAL POPULATION	Any services used				
	%	Region I OR	Region IIa OR	Region IIb OR	Region III OR		%	Region I OR	Region IIa OR	Region IIb OR	Region III OR
Gender						**Use of any health service (last 4 weeks)**					
(Men)	34.00	1.000	1.000	1.000	1.000	(No)	47.5	1.000	1.000	1.000	1.000
Women	66.00	**0.854**	**0.737****	**0.768***	0.828	Yes	52.5	**1.960****	**2.127****	**1.876****	**1.805****
Age						**Disability**					
(65-79)	53.9	1.000	1.000	1.000	1.000	(None)	76.6	1.000	1.000	1.000	1.000
80+	46.1	1.277	**1.378****	**1.295****	.205	Instrumental	6	**4.371****	**3.250****	**2.573****	**1.899****
Education level						Basic	17.5	**6.849****	**5.984****	**3.33****	**3.410****
(Without studies or primary incomplete)	58.8	1.000	1.000	1.000	1.000	**Cronic morbidity**					
Primary complete	28.1	0.729	0.843	0.773	**0.721***	(0-3)	57.1	1.000	1.000	1.000	1.000
Secondary or superior	13.1	1.001	0.888	1.018	**0.721****	4+	42.9	**1.713****	**1.431****	**2.024****	**1.412****
Living arrangements						**Self-rated health**					
(With other different than partner)	31.1	1.000	1.000	1.000	1.000	(Good or very good)	65.6	1.000	1.000	1.000	1.000
With partner	47.4	1.037	**0.785***	**0.779***	0.876	Regular, bad or very bad	34.4	**1.535****	**1.889****	**1.885****	**1.436****
Alone	21.5	1.431	**1.299***	**1.452****	1.380*						
Have children near											
(Yes)	77.2	1.000	1.000	1.000	1.000	N: 45,553					

OR factors related to physical frailty BY REGIONS

Results from regressions: Model /Odds ratios for NUMBER OF SERVICES USED by total population

TOTAL POPULATION	%	1 OR	2+ OR	TOTAL POPULATION / Number of serviced used (ref.:o)	%	1 OR	2+ OR	TOTAL POPULATION / Number of serviced used (ref.:o)	%	1 OR	2+ OR
Age				**Self-rated health**				**Use of hospital care last year**			
(65-79)	53.9	1.000	1.000	(good or very good)	65.6	1.000	1.000	No	90.8	.0338**	0.273**
80+	46.1	1.286**	1.422**	Regular, bad or very bad	34.4	1.401**	1.587**	(Yes)	9.2	1.000	1.000
Living arrangements				**Fall (last year)**				**Use of rehabilitation care**			
(With other different than partner)	31.1	1.000	1.000	No	96.3	0.747**	0.725*	No	99.3	0.571**	0.265**
With partner	47.4	0.919	0.856	(Yes)	3.7	1.000	1.000	(Yes)	0.7	1.000	1.000
Alone	21.5	1.464**	1.993**	**Emotional Morbidity**				**Residence**			
Have children near				No	92.7	0.838**	0.807*	(Urban)	61.6	1.000	1.000
(Yes)	77.2	1.000	1.000	(Yes)	7.3	1.000	1.000	Rural	38.4	0.986	0.698**
None in same city	22.8	1.117	1.350	**Mental and nervous morbidity**				**Regional model**			
Weekly contact or more contact with friends or neigbours				No	90.1	0.752**	0.584**	(1:high covergre, high diversification)	16.4	1.000	1.000
(Yes)	17.6	1.000	1.000	(Yes)	9.9	1.000	1.000	2a: medium coverage, high diversification	31.4	0.722**	0.758*
No	82.4	1.148*	1.440**	**Digestive and Kidney morbidity**				2b:medium coverage, law diversification	23.9	0.698**	0.585**
Any architectonical barrier at home				No	96.0	0.752**	0.968	3: law coverage, law diversification	28.3	0.694**	0.407**
No	87.8	0.777**	0.631**	(Yes)	4.0	1.000	1.000				
(Yes)	12.2	1.000	1.000	**Use medical or nursing consultation (last 4 weeks)**							
Disability				(No)	47.5	1.000	1.000	N: 45,553			
(None)	76.6	1.000	1.000	Yes	52.5	1.542**	1.710**	**p<0.01 *p<0.05			
Instrumental	6.0	2.245**	3.883**								
Basic	17.5	2.776**	7.196**								

Model /Odds ratios for NUMBER OF SERVICES USED by

- **Total population:** Regions with more diversified services tend to target physical frailty more than social vulnerability ➔ *the most significant factors are disability and use of health care*

- **Gender:** similarly, disability and use of health care, but some distinct features for men and women >

  - ❑ MEN: living alone, cardiovascular and cognitive problems, falls

  - ❑ WOMEN: age, falls, depression, digestive-kidney problems, cognitive problems

Main conclusions

- **Great variability in service provision among regions**

- **4 regional "types", depending on coverage and diversification of services**

- **Regional variations to some extent respond to variations in need**

- **Regions with higher coverage *and* diversification target more persons with needs**

- **With higher diversification, the user profile shifts from social vulnerability to physical frailty**

- **By gender, beyond disabilities and use of health care, mainly living alone for men and other mental pathologies for women explain the use 2+ services**

Policy implications:

- **More diversified services provide better for needy persons**

- **We suggest that more diversified services also consider persons who live alone and have inadequate housing**

THANK YOU!