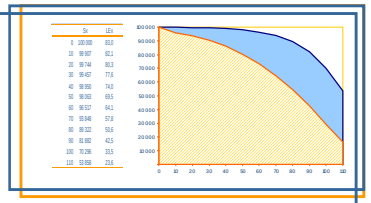
European Health & Life expectancies Information System



Similarities and differences in Healthy Life Years across the lifecourse in Europe

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REVES Annual Meeting, Havana 2010

Outline

- Why?
- How?
  - Data used
  - Analysis
- What did we find?
- What does this analysis add to existing knowledge?

RATIONALE


EUROPEAN UNION
North Sea
Atlantic Ocean
Mediterranean Sea
FINLAND
SWEDEN
ESTONIA
LATVIA
LITHUANIA
UNITED KINGDOM
DENMARK
IRELAND
NETHERLANDS
BELGIUM
LUXEMBOURG
GERMANY
POLAND
CZECH REPUBLIC
SLOVAKIA
HUNGARY
SLOVENIA
AUSTRIA
FRANCE
PORTUGAL
SPAIN
ITALY
GREECE
CYPRUS
MALTA
Members since 2004
Members before 2004
European health expectancy monitoring unit
Observatoire européen des espérances de santé

Health Indicators in the EU

- In 2004 Healthy Life Years (HLY), a disability-free life expectancy, was added to the list of structural indicators
  - The first EU health structural indicator
- Substantial differences found in HLY at age 50 between 25 countries of EU in 2005 particularly between Eastern and Western European countries*
  - Artificial groupings: north, south, east, west
  - Focus on birth and age 65 rather than whole age range
  - Focus on HLY: are results same for other measures?

*Jagger et al., Lancet 2008; 372: 2124–31

METHODS

Data

- EU Statistics on Income and Living Conditions (EU-SILC) 2005-7 with 3 health questions:
  - How is your health in general? Very good / good / fair/ bad / very bad.
  - Do you suffer from (have) any chronic (long-standing) illness or condition (health problem)? Yes/ No.
  - For the past 6 months or more have you been limited in activities people usually do because of a health problem ? Yes, strongly limited / Yes, limited / No, not limited. (HLY)
- Population and mortality data for each of 25 countries for 2005-7 from EHEMU database

Methods 1

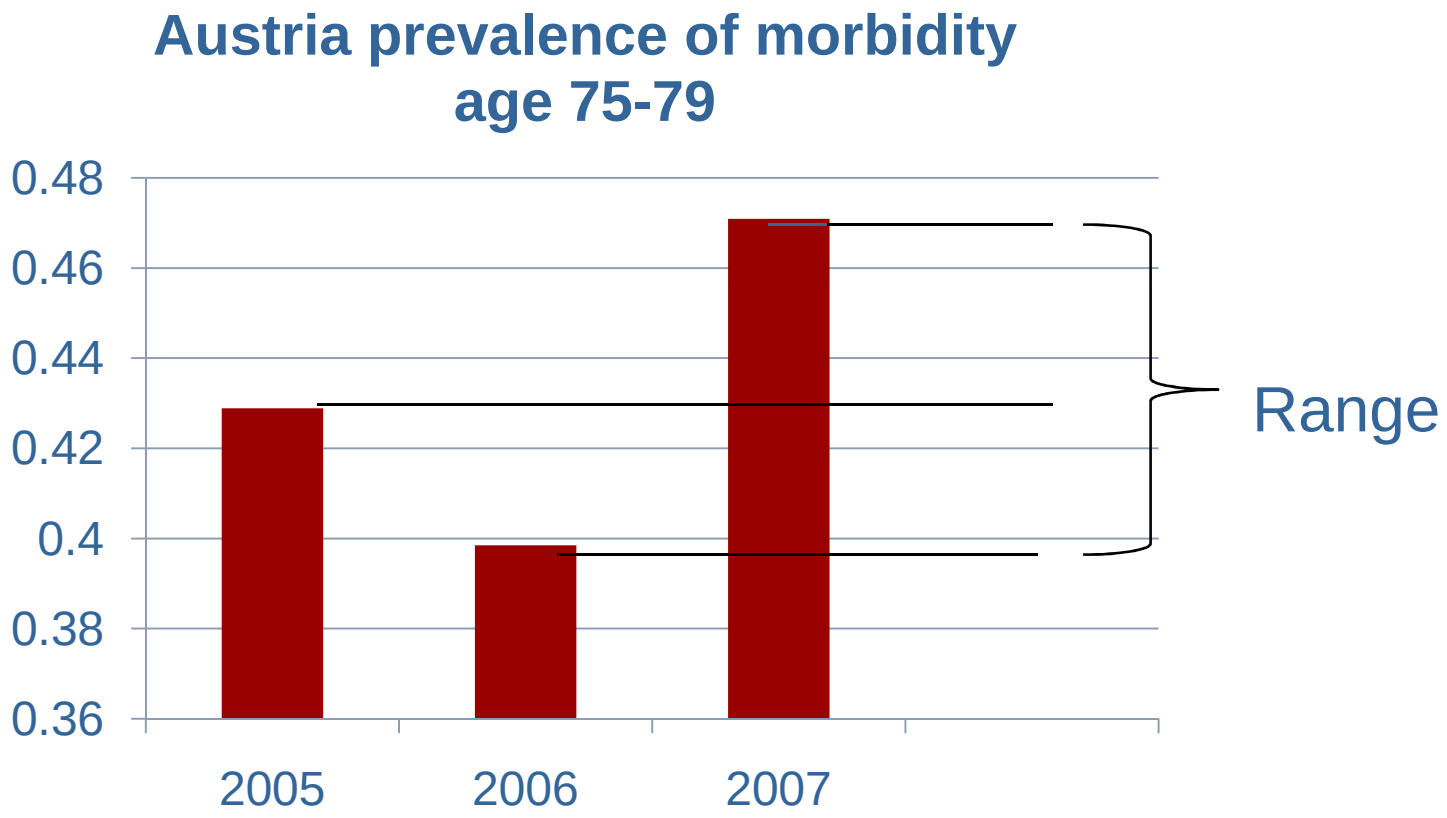
- Compared prevalence of each health measure over time within country and gender
- Combined prevalence, population and mortality over period 2005-7 for each country and gender
- Calculated partial life and health expectancies for each country to give health expectancies for ages:
  - 16-34 years
  - 35-54 years
  - 55-74 years

Methods 2

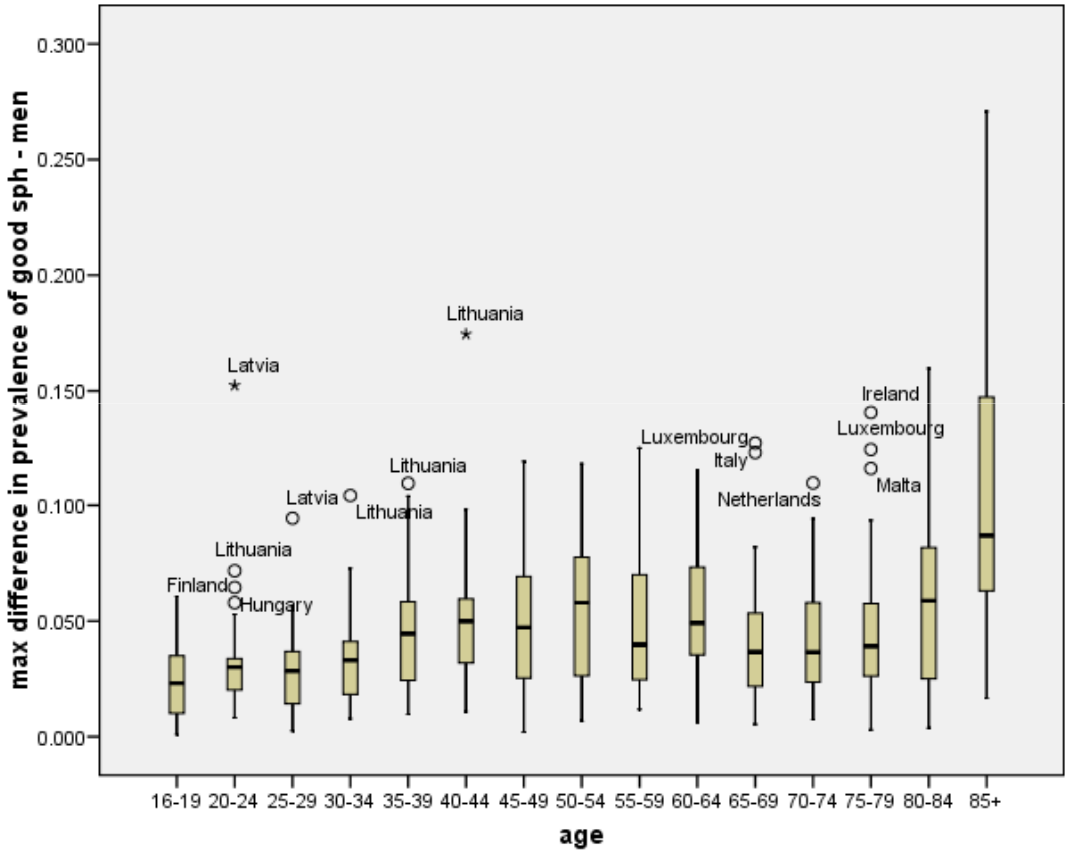
- A cluster analysis was carried out to group countries with similar LE and HEs
- The analysis was run with LEs and HEs (3 health measures) for both men and women, and for the three age groups together
- To determine the most appropriate number of clusters an index was calculated for each possible clustering solution (e.g. 1 cluster, 2 clusters, 3 clusters…)
- We chose the solution with the smallest index value for 6 or fewer clusters

RESULTS

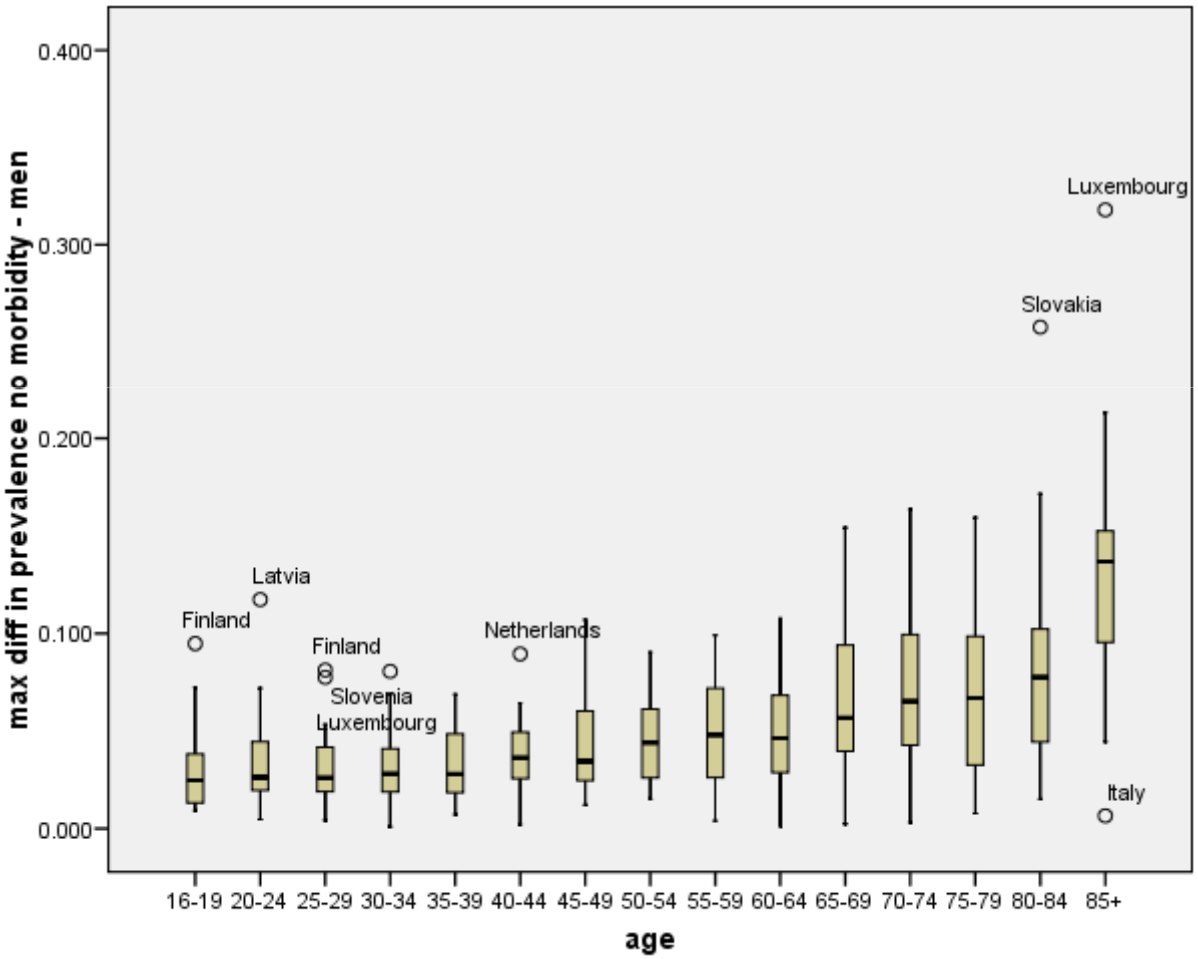
Comparing prevalence over time



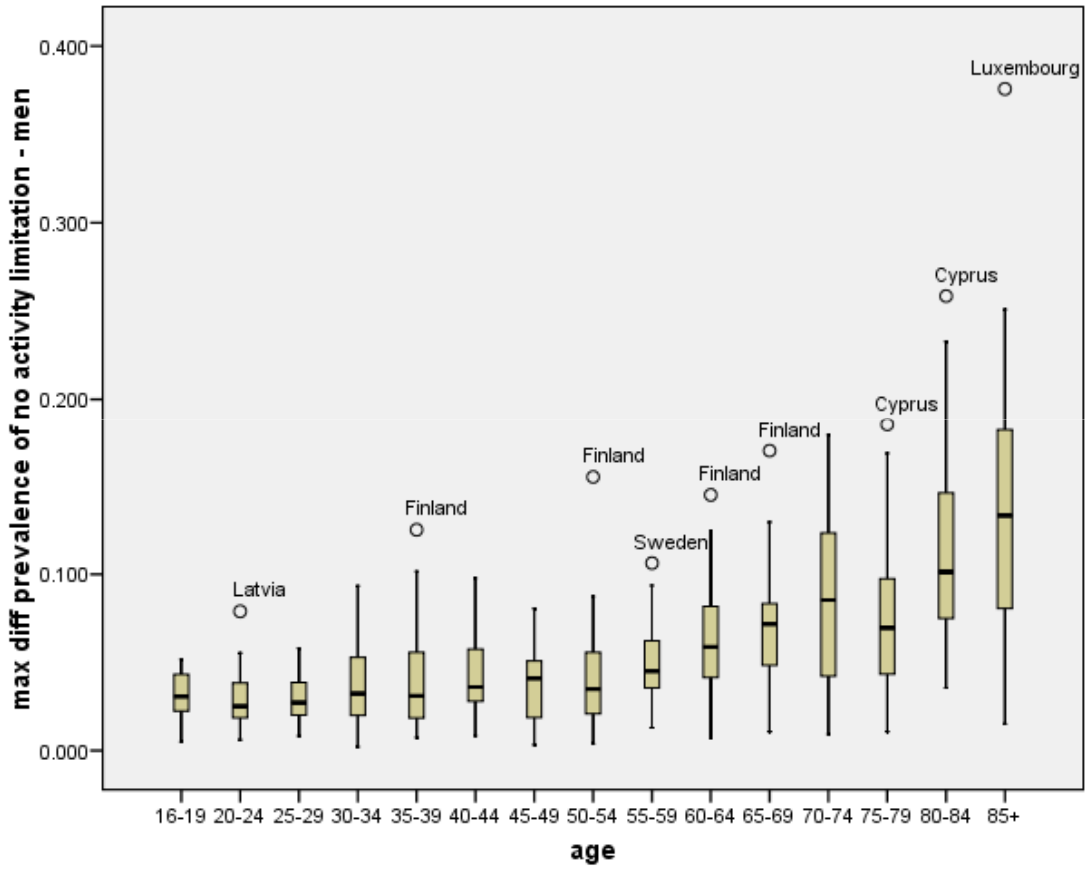
Good SPH: men


max difference in prevalence of good sph - men
0.300
0.250
0.200
0.150
0.100
0.050
0.000
Lithuania
Latvia
Ireland
Luxembourg
Italy
Lithuania
Luxembourg
Malta
Latvia
Lithuania
Netherlands
Lithuania
Finland
Hungary
16-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65-69 70-74 75-79 80-84 85+
age

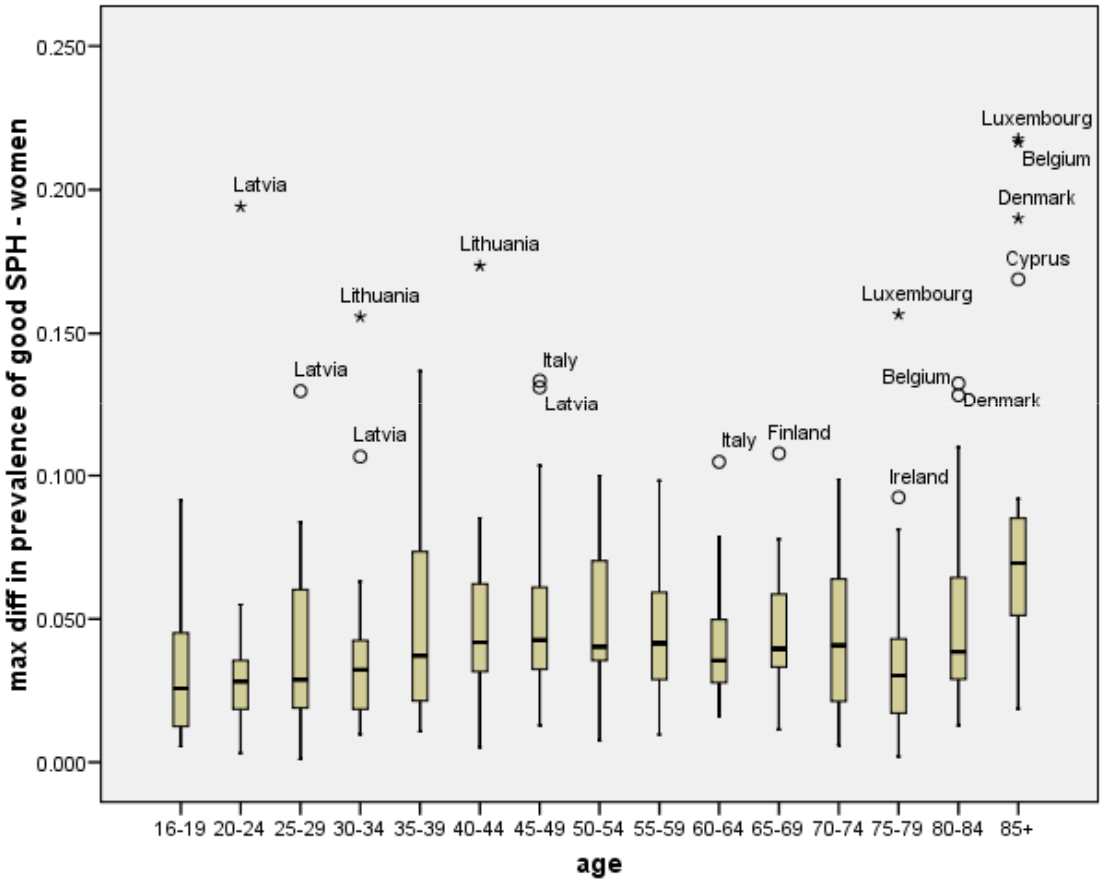
No morbidity: men



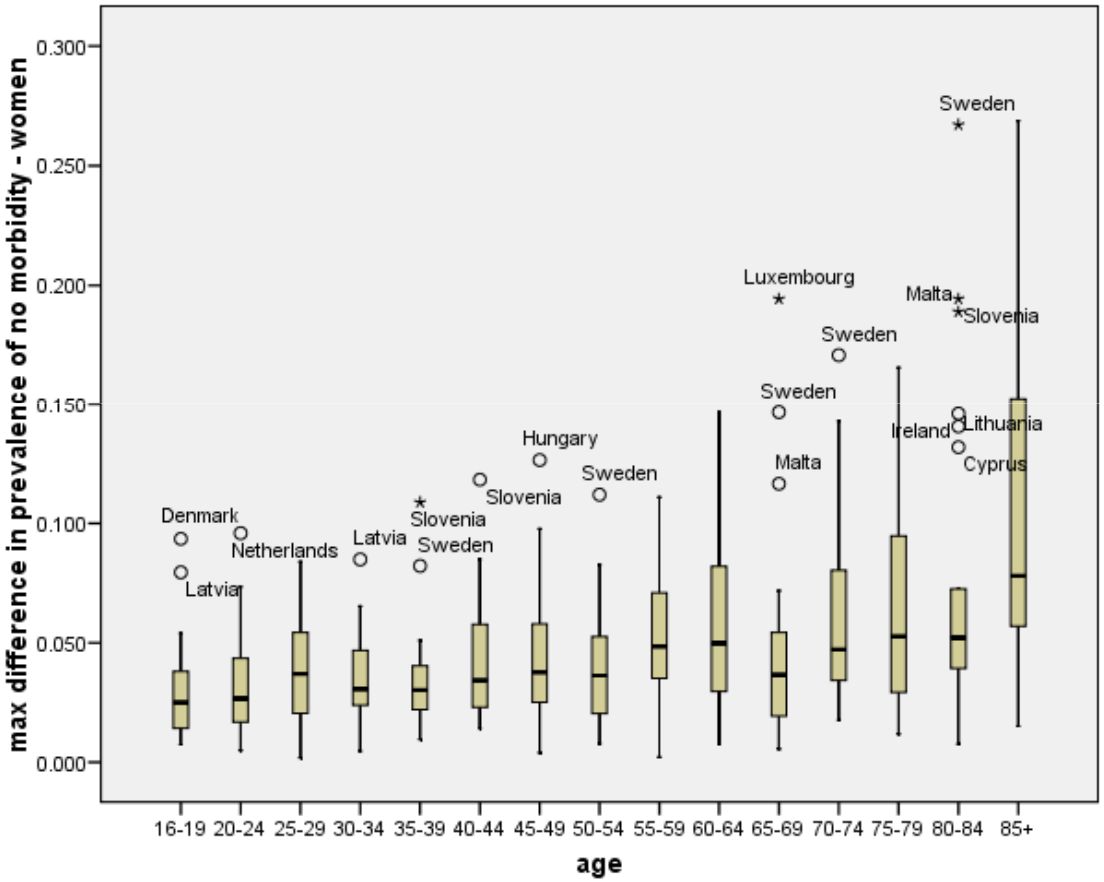
No activity limitation: men



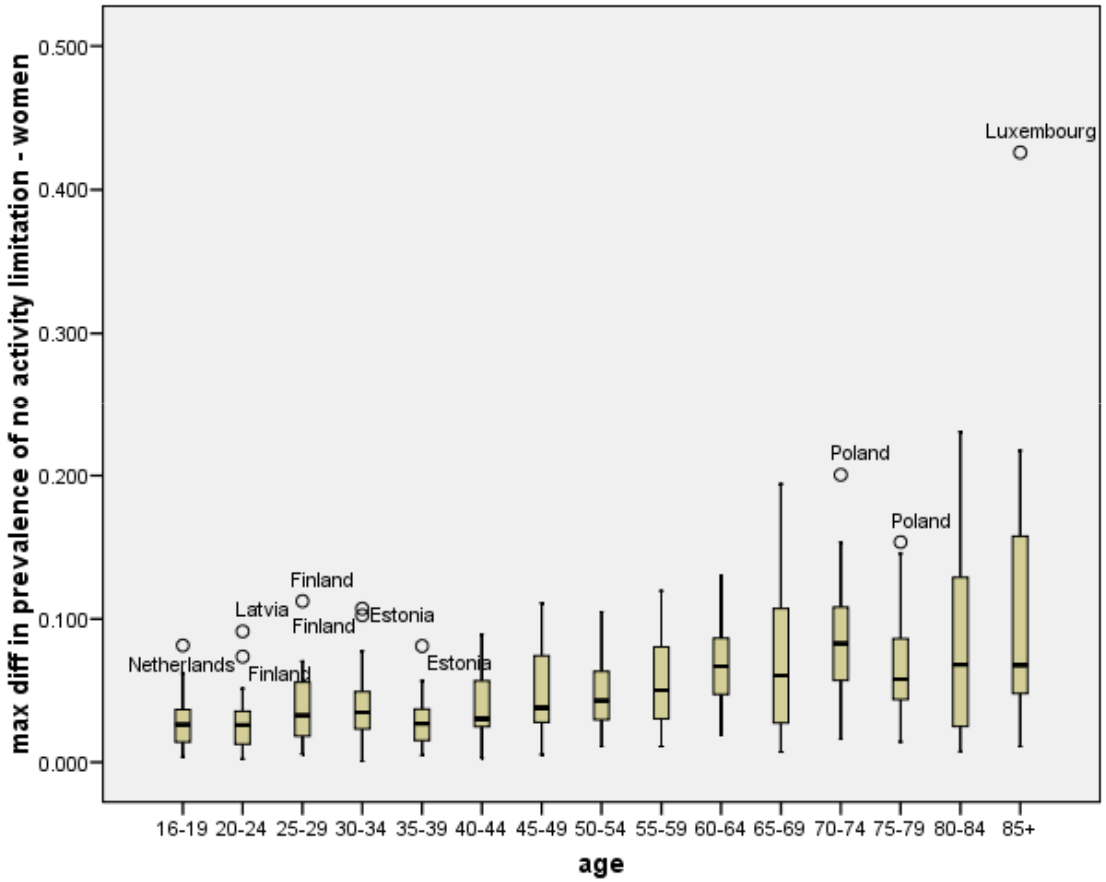
Good SPH: women



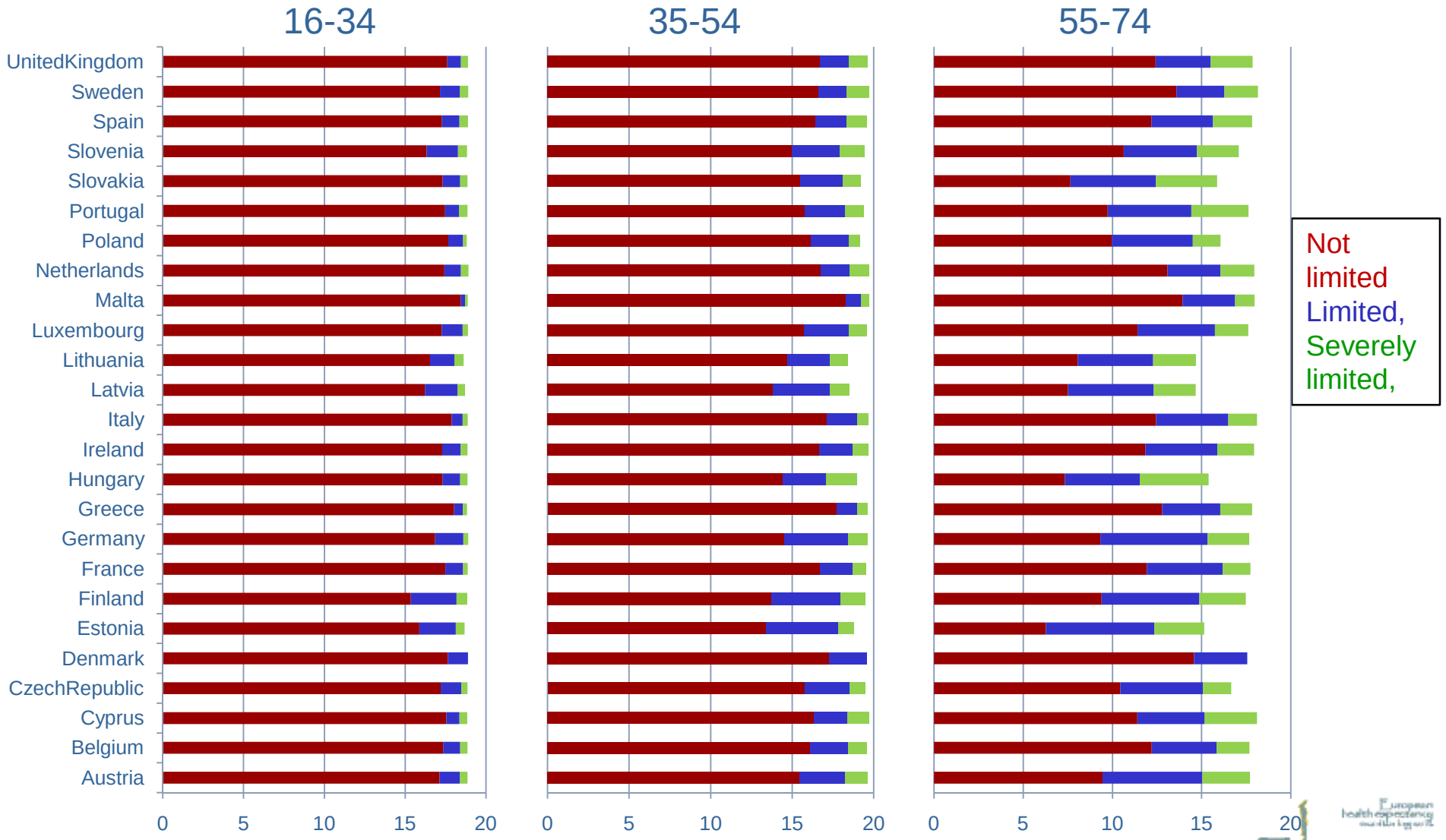
No morbidity: women



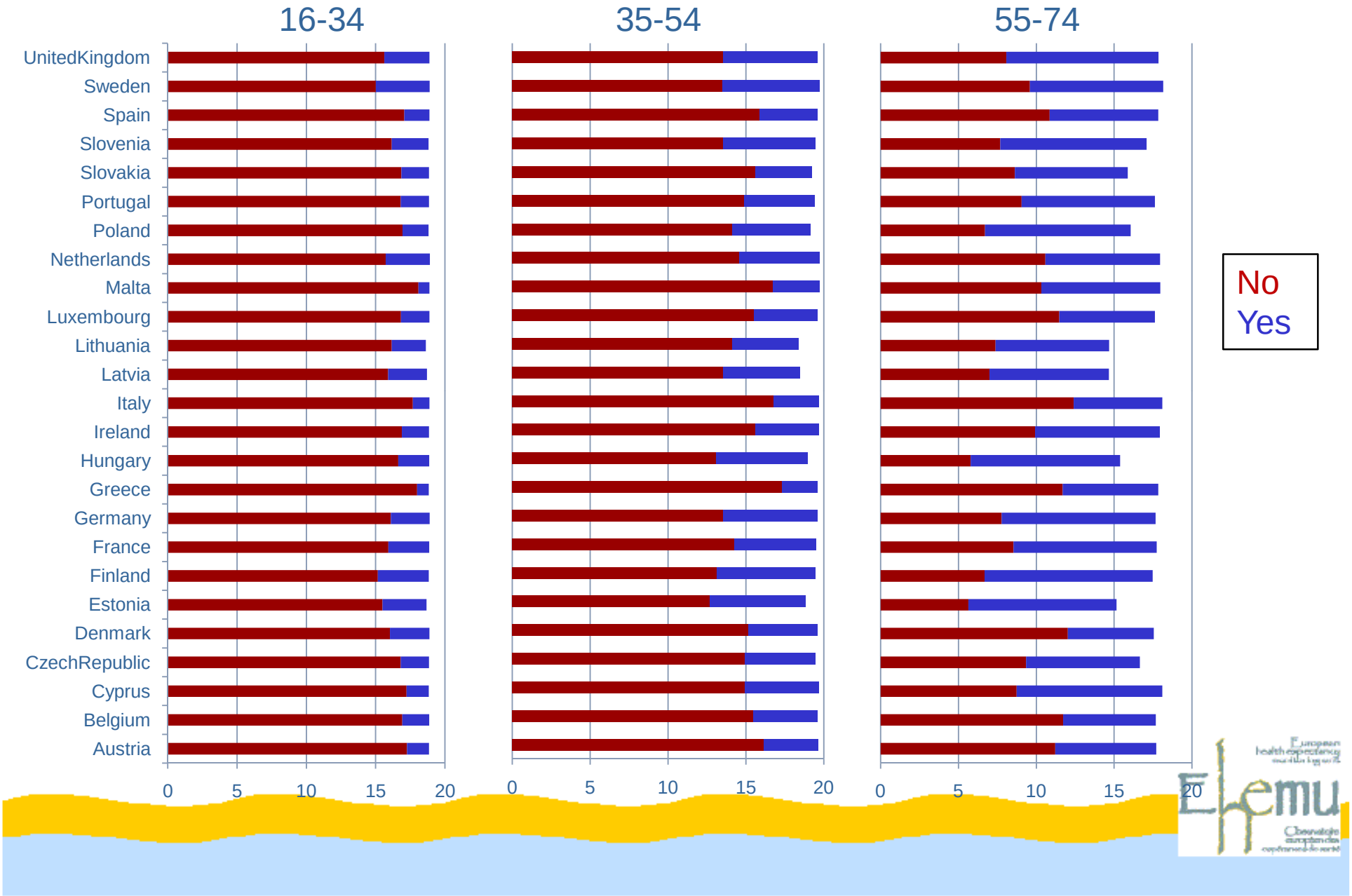
No activity limitation: women



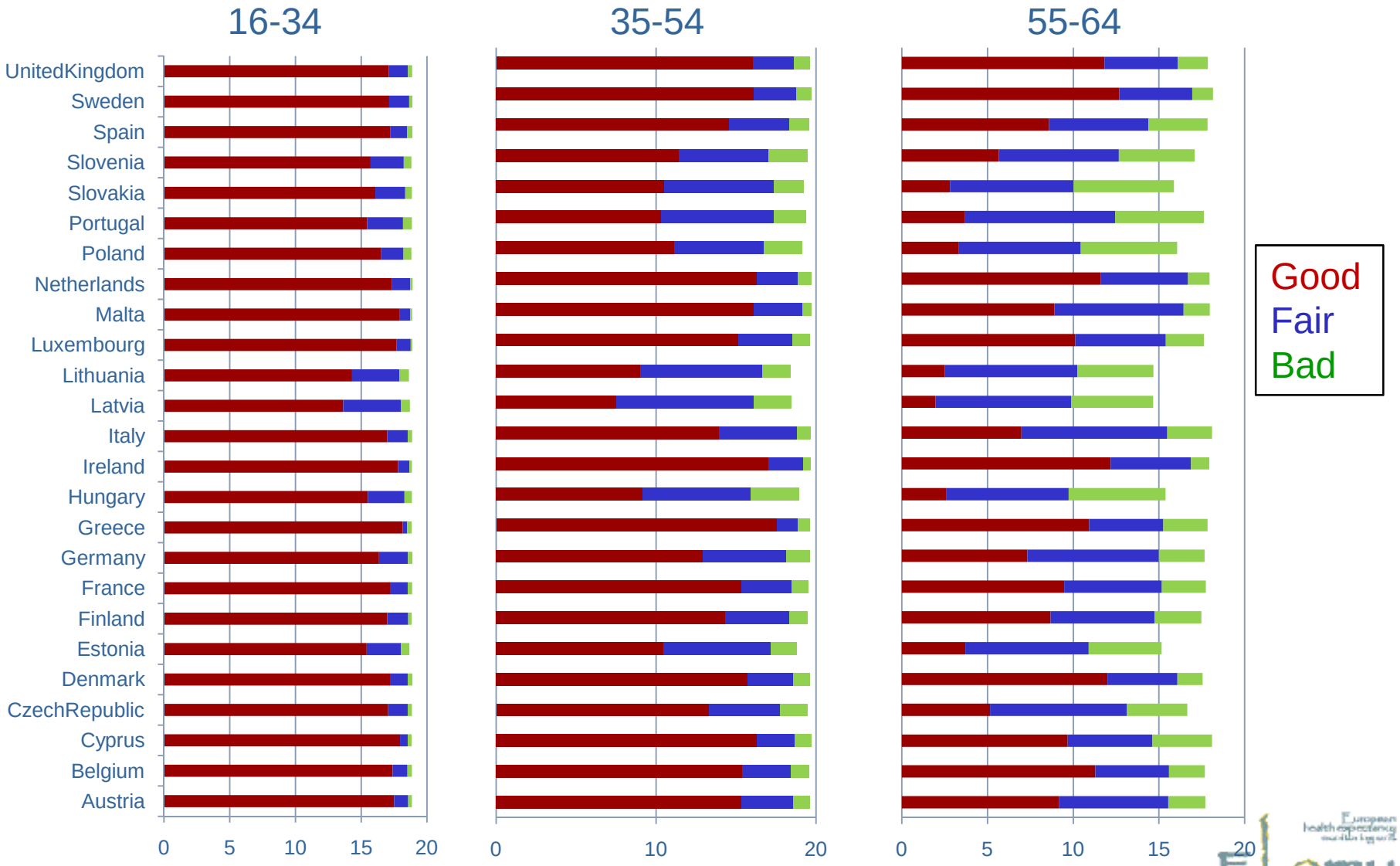
Partial HLYs: men



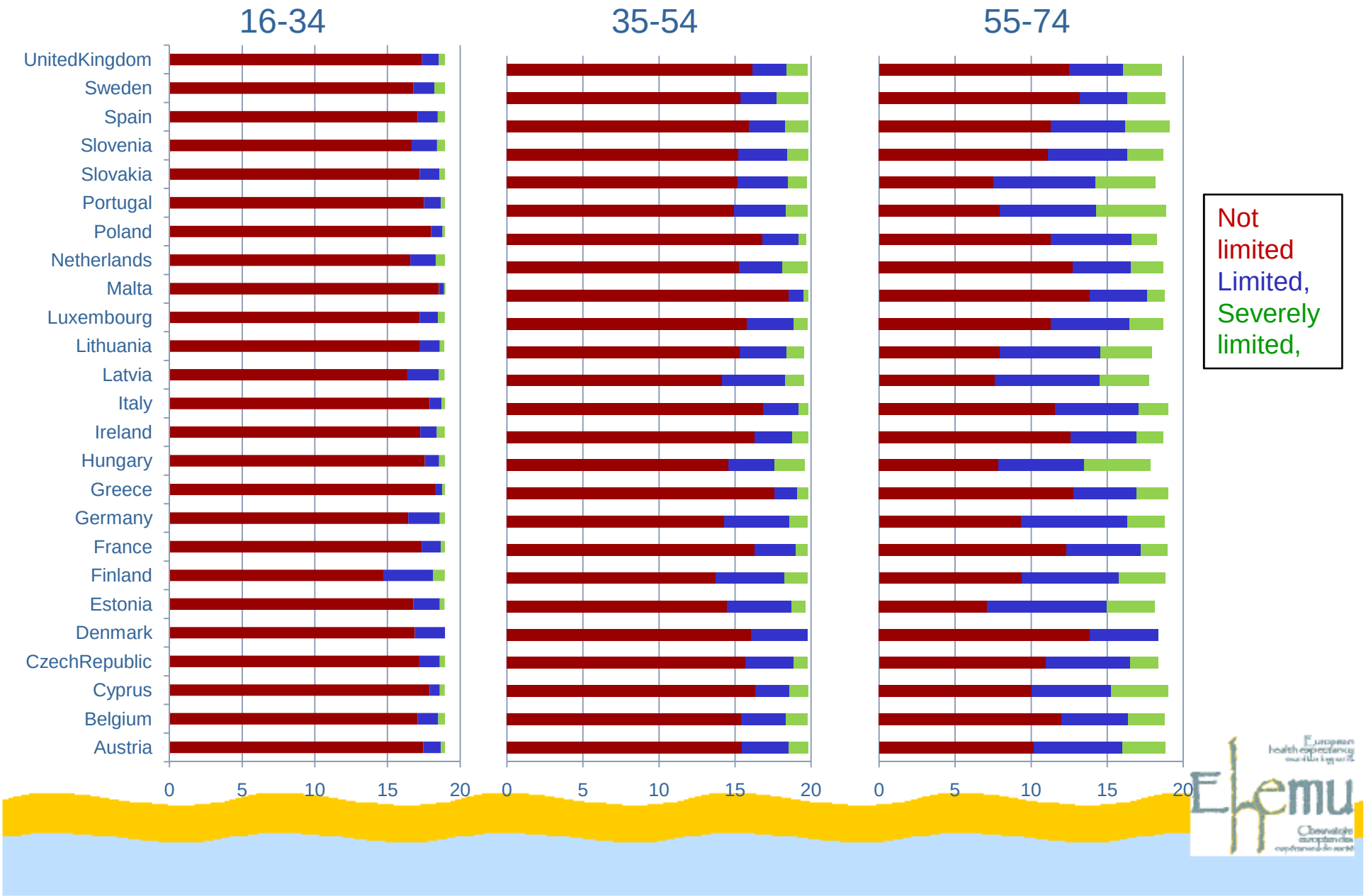
Partial LE with morbidity: men



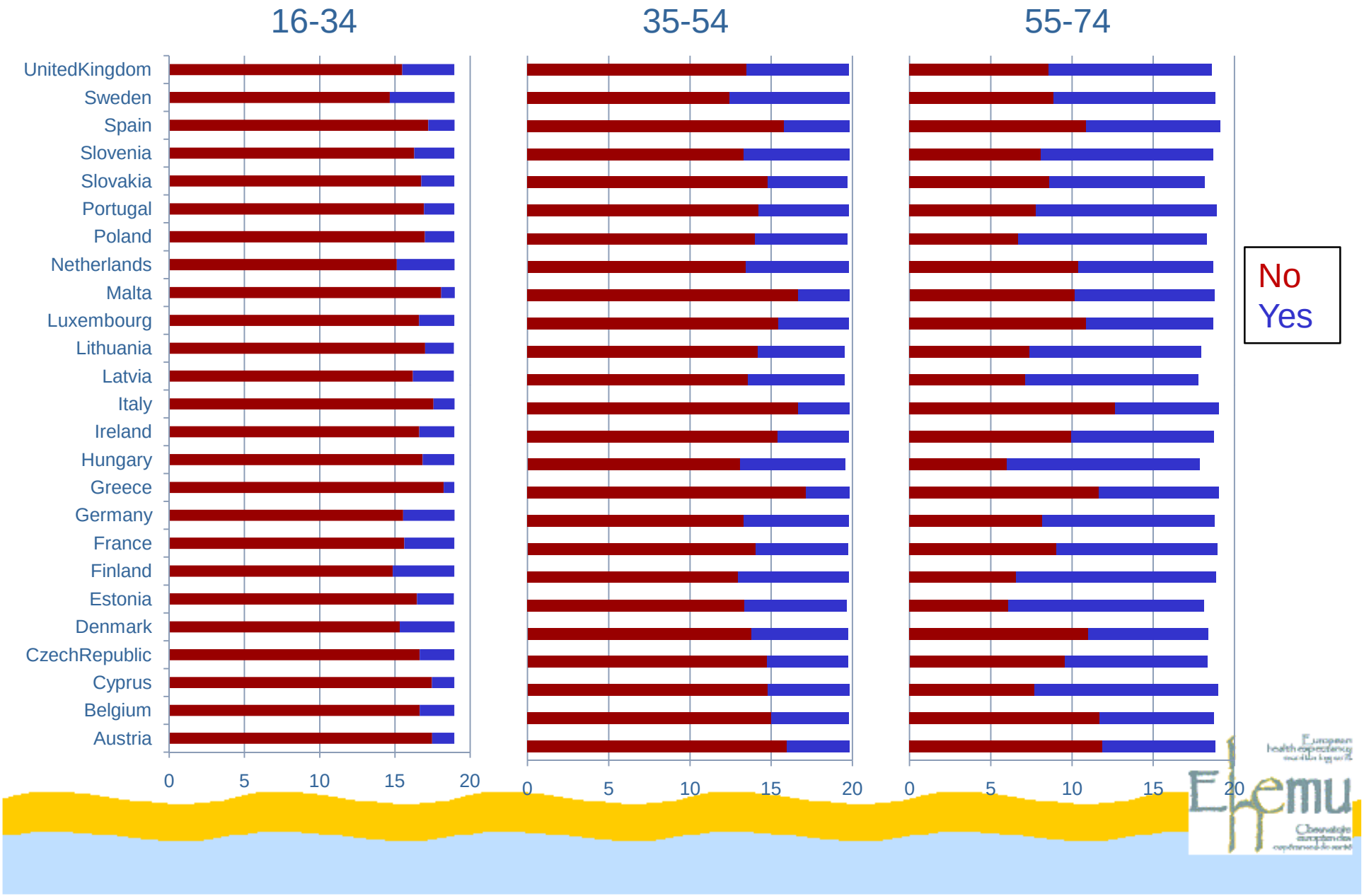
Partial LE with good sph: men



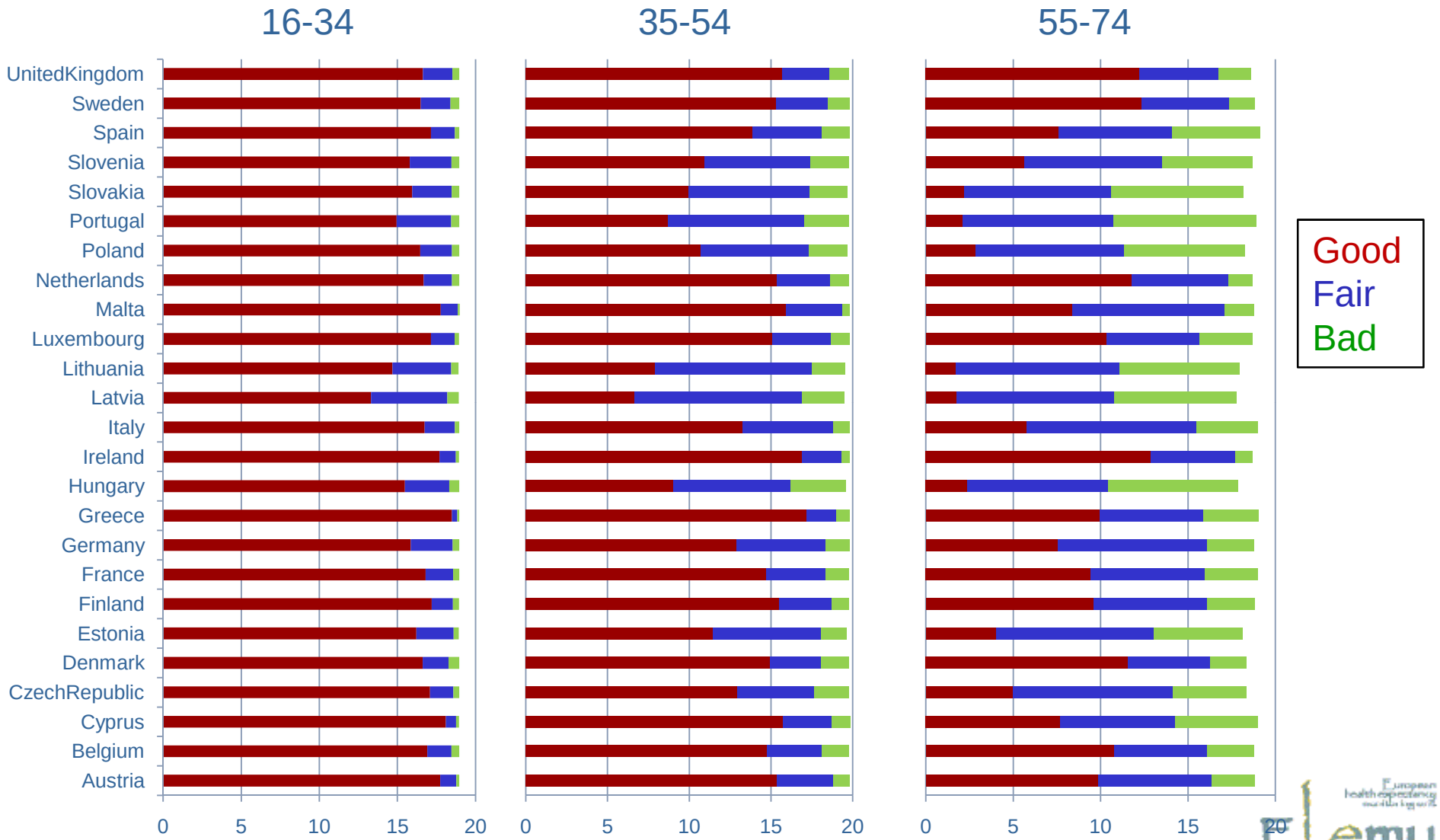
Partial HLYs: women



Partial LE with morbidity: women



Partial LE with good sph: women



Partial life and health expectancies by cluster

		1	2	3	4	5	6	All
Age 16-34 yrs LE	M	18.8	18.8	18.9	18.9	18.9	18.9	18.8
	F	18.9	19.0	19.0	19.0	19.0	19.0	18.9
LE free of morbidity	M	16.4	15.2	16.4	15.9	18.0	17.0	16.5
	F	16.7	14.9	16.2	15.4	18.2	16.9	16.5
LE free activity limitation (HLY)	M	16.9	15.3	16.8	17.4	18.2	17.4	17.2
	F	17.2	14.7	16.8	17.0	18.4	17.4	17.2
LE in good SPH	M	15.3	17.0	16.4	17.3	18.0	17.4	16.7
	F	15.3	17.2	16.2	16.8	18.1	17.2	16.6
Age 35-54 yrs LE	M	18.9	19.5	19.5	19.7	19.7	19.6	19.4
	F	19.6	19.8	19.8	19.8	19.8	19.8	19.7
LE free of morbidity	M	14.0	13.1	14.0	14.5	17.0	15.6	14.7
	F	13.9	13.0	13.8	13.7	16.9	15.4	14.5
LE free activity limitation (HLY)	M	14.8	13.7	15.1	16.8	18.0	16.3	15.9
	F	15.1	13.7	15.1	15.8	18.1	16.0	15.7
LE in good SPH	M	9.7	14.3	12.5	16.3	16.8	15.1	13.6
	F	9.2	15.5	12.3	15.6	16.5	14.7	13.2
Age 55-74 yrs LE	M	15.6	17.5	17.1	17.9	17.9	17.8	17.1
	F	18.1	18.8	18.6	18.6	18.9	18.9	18.6
LE free of morbidity	M	7.2	6.7	8.3	10.0	11.0	10.7	9.2
	F	7.1	6.6	8.6	9.8	10.9	10.7	9.1
LE free activity limitation (HLY)	M	8.1	9.4	10.1	13.1	13.4	11.6	10.8
	F	8.2	9.4	10.5	13.0	13.3	11.2	10.7
LE in good SPH	M	2.9	8.7	6.0	12.1	9.9	9.3	7.7
	F	2.4	9.6	6.1	12.1	9.2	8.8	7.4

1= Estonia, Hungary, Latvia, Lithuania, Poland, Portugal, Slovakia

2 = Finland,

3 = Czech Republic, Germany, Slovenia

4= Denmark, Ireland, Netherlands, Sweden, United Kingdom

5= Greece, Malta

6= Austria, Belgium, Cyprus, France, Italy, Luxembourg, Spain

What this study adds

- Country clusters only partly reflect other geographies
- Estonia, Hungary, Latvia, Lithuania, Poland, Portugal, Slovakia lowest LE and LE in good SPH at all ages
- Finland average (or better) LE but lowest LE free of morbidity and HLY at all ages
- Czech Republic, Germany, Slovenia average or above LE but second lowest years in good SPH
- Denmark, Ireland, Netherlands, Sweden, UK second lowest LE free of morbidity for 16-34 age group but above average HLY and LE in good SPH at 55-74
- Greece, Malta, consistently the highest on all measures across all age range (except LE in good SPH at 55-74)
- Differences observed between countries may reflect country specific healthcare, environment and individual lifestyles

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  - G Doblhammer (Max Planck Institute, Germany)
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