

## Self-perceived health

*How is your health in general? Is it...*

1. Very good
2. Good
3. Fair
4. Bad
5. Very bad



## Chronic morbidity

*Do you have any chronic illness or condition?*

1. Yes
2. No



## Global activity limitation (GALI)

*For at least the past 6 months, to what extent have you been limited because of a health problem in activities people usually do?*

Would you say you have been...

- 1.severely limited
- 2.limited but not severely, or
- 3.not limited at all



## Health expectancies in Europe

- Life expectancy in good perceived health

*How is your health in general? Is it... Very good + Good*

- Life expectancy without chronic disease

*Do you have any chronic illness or condition? No*

- Life expectancy without activity limitation

*For at least the past 6 months, to what extent have you been limited because of a health problem in activities people usually do? Not limited at all*



## Healthy Life Years (HLY)

(Life expectancy without activity limitation)

- Selected as part of the Lisbon Strategy (2000-2010) to assess the quality of life and functional health status of Europeans

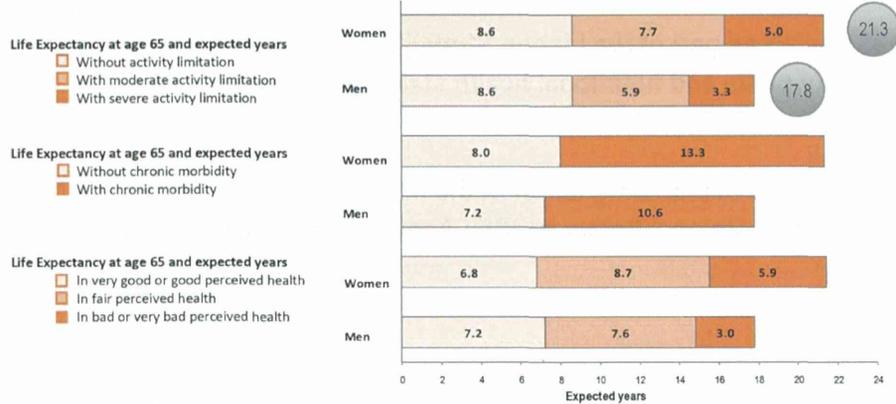
- Set as the overarching target of the first partnership of Innovation Union “Active Healthy Ageing”: **an increase in HLY of two years by 2020**



## Producing country profiles



Life and health expectancies at age 65 based on activity limitation (Healthy Life Years), chronic morbidity and perceived health for EU27, in 2011, by gender (Health data from SILC)



## Monitoring changes over time



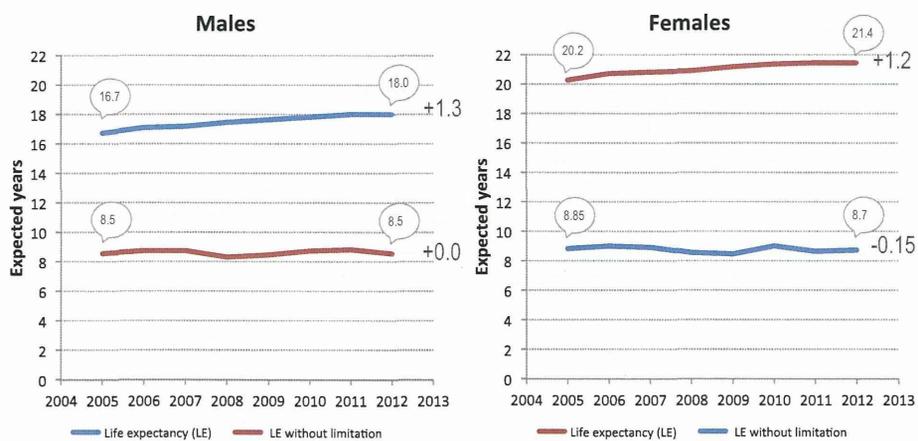
## How long can we live in good health?

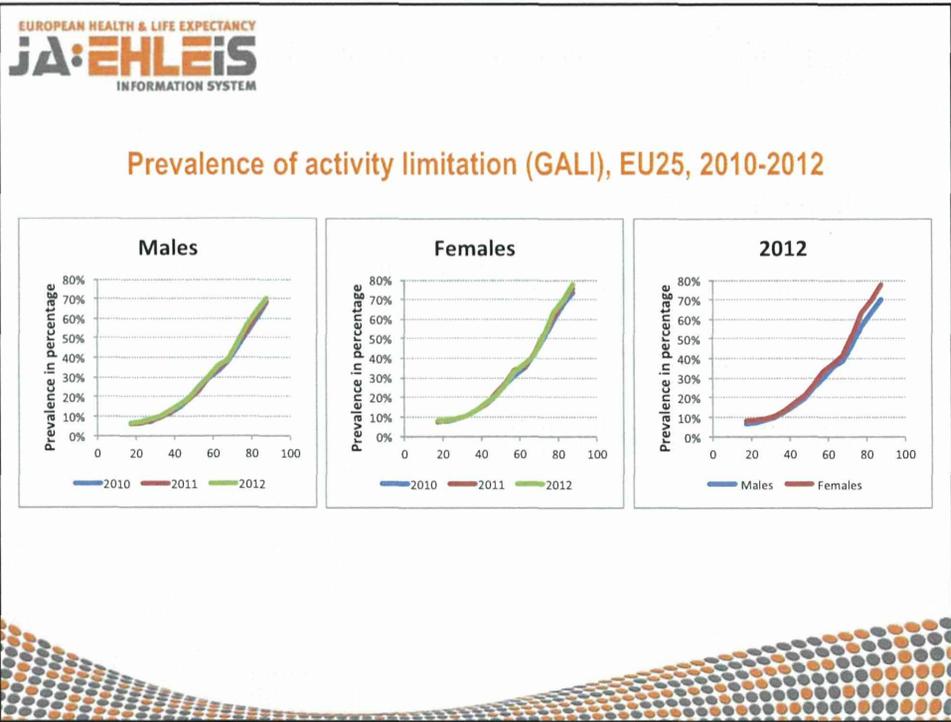
### 3 main theories:

- Compression of morbidity/disability
- Dynamic equilibrium
- Expansion of morbidity/disability



## Life and HLY at age 65, EU25, 2005-2012





**EHLEIS Country Reports Issue 6 - April 2013**

### Health Expectancy in Austria

**What is health expectancy?**  
EHLEIS infusio de nates  
Yusman 8 - April 2013  
Esperanza de vida saludable en España  
¿Qué es la esperanza de vida?

### Health Expectancy in Germany

**What is health expectancy?**  
Health expectancy is a measure of the number of years of life that a person can expect to live in good health.  
The European Union has decided to include a small set of health indicators among its European Community Health Indicators (ECHI) to provide summary measures of disability (i.e. activity limitation), chronic morbidity and perceived health. Therefore the Minimum European Health Module (MEMH), composed of 3 general questions covering these dimensions, has been introduced into the Statistics on Income and Living Conditions (SILC) to improve the comparability of health expectancies between countries. In addition, life expectancy without long term activity limitation, based on the disability question, was selected in 2004 to be one of the structural indicators for assessing the EU strategic goal (Lisbon strategy) under the name of 'Healthy Life Years' (HLY).

### Health Expectancy in United Kingdom

**What is health expectancy?**  
Health expectancies were first developed to address whether or not longer life is being accompanied by an increase in the time lived in good health (the compression of morbidity) or in bad health (expansion of morbidity). So health expectancies divide life expectancy into life spent in different states of health, from say good to bad health. In this way they add a dimension of quality to the quantity of life lived.

**How is the effect of longer life measured?**  
The general model of health transitions (WHO, 1984) shows the difference between life spent in different states: total survival, disability-free survival and survival without chronic disease. This leads naturally to life expectancy (the area under the 'mortality curve'), disability-free life expectancy (the area under the 'disability curve') and life expectancy without chronic disease (the area under the 'morbidity curve').

The general model of health transition (WHO, 1984) showed mortality and hypothetical morbidity and disability survival curves for females, UCL, 1982

There are in fact as many health expectancies as concepts of health. The economic health

### Health Expectancy in Cyprus

**What is in this report?**  
This report is produced by the Joint Action European Health and Life Expectancy Information System (EHLEIS) in part of a country series in health report we present:  
Life expectancies and Healthy Life Years (HLY) at age 65 for the country of interest and for the overall 25 European Union member states (EU25) in age brackets: in the long term health-related disability indicators from 2006 to 2011, using the SILC question on long term health-related disability. The previous HLY series based on the disability question of the 1995-2001 European Community Household Panel (ECHP).  
Health expectancies based on the two additional questions of Health Expectancy of Disability and Life Expectancy without chronic disease based on the SILC 2009.  
Maximum and minimum values of these health-related activity limitation, chronic morbidity and disability indicators (SILC 2009).

EUROPEAN HEALTH & LIFE EXPECTANCY  
**A:EHLEIS**  
INFORMATION SYSTEM

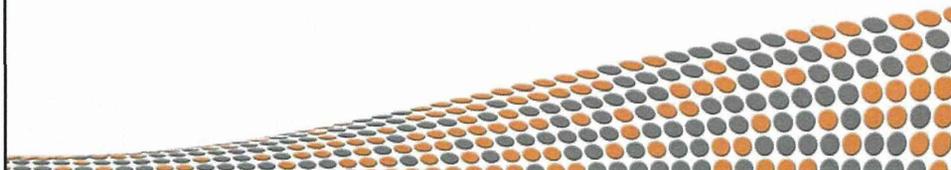
[www.eurohex.eu](http://www.eurohex.eu)



EUROPEAN HEALTH & LIFE EXPECTANCY  
**EHLEIS**  
INFORMATION SYSTEM

International Workshop on Health Expectancy:  
Harmonizing Summary Measures of Population Health  
Tokyo, October 14-16, 2014

Thank you for your attention!



## The development of a blueprint for a Summary Measure of Population Health WP 7 JA: EHLEIS

H. Van Oyen, N. Berger and the JA:EHLEIS

14 October 2014

### Historical overview

Necessity of measures summarizing population health and functioning:

- Lois Verbrugge :
  - ⇒ REVES meeting ROME, 1996
  - ⇒ A global indicator of disability, Journal of Aging Studies, 11:337-362, 1997
  
- Euro-REVES projects:
  - ⇒ Complex instruments
    - // Functional limitation (physical, sensorial)
    - // Activity restrictions
    - // Mental health: psychological distress
    - // Mental health: positive mental health
  - ⇒ Global instruments: Minimum European Health Module (MEHM)
    - // Self-Perceived Health
    - // Chronic conditions
    - // Participation restrictions: GALI

## Historical overview

### GLOBAL ACTIVITY LIMITATION INDICATOR : GALI

- Evolution from ICIDH to ICF : functional limitations / participation restriction
- Survey to + 50 international expert
- Systematic review +30 instruments

Table 2 Conceptual criteria for a Global Activity Limitation Indicator (GALI)

1	A concise set of questions: between one and three questions maximum
2	Presence of long-standing limitations: duration at least 6 months
3	Cause of activity limitation: a general health problem
4	Usual activities: the reference is to activities people usually do
5	Severity of limitations: inclusion of full range in the response with at least three levels
6	No preceding screening for health conditions

Table 3 Practical criteria for a Global Activity Limitation Indicator (GALI)

1	Questions compact and in simple words
2	Same instrument for total population (including institutionalized population)
3	Same instrument for all age categories
4	To be used without further explanation or instructions
5	To be used in self-administered, face-to-face or telephone survey
6	To be used in general, health and disability surveys
7	No comparison with same age group, sex or with previous periods
8	Validated
9	If necessary the GALI can be extended by sub-questions, indicating specific life situations: school/work, house, leisure time
10	Specific question for identification of the health causes of the activity limitation
11	Specific question for use of devices or assistance

Robine et al:EJPH, 13 (3 suppl): 6-14, 2003

## The Joint Action EHLEIS (2011-2014)

**Aim:** to consolidate existing information on life and health expectancy in the EU

### Main Tasks:

- To provide online information on LE and HE ([www.eurohex.eu](http://www.eurohex.eu))
- To analyse trends in HLY within the EU (Annual Country Report)
- To identify determinants of the inequalities in HLY
- To analyse socio-economic differences in HLY
- To develop statistical tools for the analysis of HE
- To validate the Global Activity Limitation Indicator (GALI)
- To strengthen international harmonisation of Summary Measures of Population Health (SMPHs)



## Harmonisation of SMPHs

### Overall objectives of the Work Package

To have a **conceptual discussion** on

the evaluation and possible improvement of SMPHs - in particular Health Expectancies

the use of SMPH as a population health outcome measure of (health) policy and (health) policy interventions

the development of blueprint for an improved SMPH which has a higher comparability at EU and OECD level



## Harmonisation of SMPH

### Outcome of the Work Package

A **blueprint** for a new SMPH (Health Expectancy) which is comparable at EU/OECD level:

Selection of a **health dimension** for which a comparable measure is needed at EU/OECD level to calculate Health Expectancies

Suggestion of protocols / guidelines in the creation of a **global survey instrument**, testing, validation and implementation in international context



## Methods

## Setting up a Working Group

Experts from various OECD countries and organizations were invited to participate to a working group on international harmonization of SMPHs (November 2011):

- The JA: EHLEIS (14)
- The United States (2)
- Japan (1)
- Eurostat (2)
- OECD (1)
- WHO Europe (1)
- European Commission (DG Sanco) (1)

### 3 seminars organised in Paris

#### April 2012: “Concepts behind SMPH” (1 day)

Short experts survey, literature review, presentations of national uses of SMPHs, group discussion on important health dimensions

#### April 2013: “Global Disability Indicator” (1 day)

Literature review, working document preparation, review, group discussions

#### April 2014: “Blueprint for a new SMPH” (1 ½ days)

Extended experts surveys (REVES members), critical evaluation of the working document, final discussion



## Results



## 1<sup>st</sup> seminar: conclusions

Similar Health Expectancies used in the EU, the US and Japan  
Health dimensions: Self-Rated Health; Chronic Morbidity; Activity Limitations

...But different survey instruments => limited comparability

=> Need for an internationally comparable **global disability indicator** (for the calculation of DFLE)



## 2<sup>nd</sup> seminar: conclusions

Disability is too broad to be measured comprehensively with a global approach

=> Selection of a dimension of disability: **participation restriction**

Supplement measure: global measure of **functional limitation**



1. Rationale: main **objectives** of Health Expectancies
2. Measurement priority: DFLE and **global measure of disability**
  1. Conceptual perspective on disability
  2. Rationale for a global measure of disability
3. Desired **conceptual characteristics** of the global indicators
  1. **Participation restriction**
  2. **(Functional limitation)**
4. **Technical characteristics** of a global indicator
5. Instrument selection and **design**
6. **Translation, testing and validation**
7. Recommendation for **implementation**
8. Conclusion

Priority measure = **participation restriction**

Supplement measure = **functional limitation**

### Rationale

1. Participation **summarises** disability – Reflects best ICF
2. The 2 dimensions are useful for public policies
  - A. **Disability and Health policies**  
e.g. United Nation Convention on the Rights of People with Disabilities  
cf. Washington Group and Budapest Initiative rationales
  - B. **Ageing Policies** – Active and Healthy Ageing

### 3. Conceptual characteristics: Participation restriction

1. Measure of participation => performance
2. With assistive devices and/or personal assistance
3. Health-relatedness [survey: 83% relevant]
4. Long-term duration of limitations [survey: 80% relevant]
5. Comprehensive content [survey: 74% relevant]
6. Normative comparison [survey: 67% relevant]
7. Severity of limitations [survey: 87% relevant]

### 3. Conceptual characteristics: Functional limitation

1. Measure of functional limitation => capacity
2. Without assistive devices and/or personal assistance
3. Long-term duration of limitations [survey: 80% relevant]
4. Comprehensive content
5. Severity of limitations [survey: 96% relevant]

## 4. Technical characteristics of a global indicator

1. Conciseness of the instrument
2. Usability for general population
3. Simplicity of the question(s)
4. Amenability to multi-modes of collection



## 5. Instrument design

Non-systematic review of the literature & experts survey results:

1. **Participation restriction:** no generally accepted global measure outside EU (although the GALI is conceptually close)

=> To design

GALI:

*'For at least the past 6 months, to what extent have you been limited because of a health problem in activities people usually do? Would you say you have been; 1. severely limited, 2. limited but not severely, or 3. not limited at all?*



## 5. Instrument design

Non-systematic review of the literature & experts survey results:

2. **Functional limitation:** 4 items of the Washington Group short set as a starting point

=> Evaluate whether the dimensions of the instrument are the most relevant for EU/OECD countries

e.g. # of teeth as a measure of functional limitation (proposed by Japan)



## Conclusion

The suggested global measures – participation restriction (in priority) and functional limitation (as a supplement) – would allow to calculate internationally comparable Health Expectancies which are highly policy relevant.

**Further work is needed!**

**Next step:** to design and test a global measure of participation

**Recommendation for further work:** to share the leadership between the EU, the US and Japan and to invite additional OECD countries to take part to the initiative



**Thank you for your attention!**

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# Washington Group on Disability Statistics

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Mitchell Loeb  
National Center for Health Statistics /  
Washington Group on Disability Statistics

2/26/2015

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## The Washington Group on Disability Statistics (WG)

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- June 2001: UN International Seminar on the Measurement of Disability
- WG established as a City Group under the aegis of the UN Statistical Commission to:
  - address the need for population based measures of disability
  - foster international cooperation in the area of health and disability statistics
  - produce internationally tested measures to monitor status of persons with disability
  - incorporate disability into national statistical systems

2/26/2015

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## The WG is Country driven

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- Countries have ownership
- The Secretariat for the WG is located at the National Center for Health Statistics
- A rotating Steering Committee oversees the work plan of the WG and preparations for the annual meetings
- Workgroups lead the development of specific tasks: currently child disability, the environment and participation, and analysis & dissemination
- Emphasis on evidence and transparency – extensive testing of questions in multiple countries

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2/26/2015

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## Membership of the WG

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- Current representatives from national statistical authorities include 118 countries and territories
- Past and present representatives of international and national organizations representing persons with disabilities, and several national government and non-government organizations
- Other international organizations including among others: EUROSTAT, ILO, OECD, World Bank, WHO, UNICEF, UNESCAP, etc.

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2/26/2015

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