



The development of a blueprint for a Summary Measure of Population Health

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Background





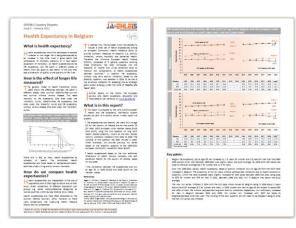
The Joint Action EHLEIS (2011-2014)

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

Main Tasks:

- To provide online information on LE and HE (<u>www.eurohex.eu</u>)
- 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 organisations 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)



Activities of the Working Group

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





1st 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)





2nd 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





3rd seminar: the Blueprint

- 1. Rationale: main **objectives** of Health Expectancies
- 2. Measurement priority: DFLE and global measure of disability
 - 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



1. Objectives of Health Expectancies

- Monitoring change in the health of population
- Comparing the health of one population with another
- Identifying and quantifying health inequalities
- Comparing groups within a population

Priority for the JA:EHLEIS: monitoring population health and allowing comparison across European Union and OECD countries.

=> Need for comparable health information





2. Measurement priority: DFLE and global measure of disability

Experts survey: measurement priorities of the 21st century?

Dimension	Frequency
Disability	9
Mental health	8
Chronic morbidity	5
Participation	4
HRQoL	3
Index of health	3
Activity limitation	2

Our priority: **Disability.** Why?

- i) It is less problematic to measure in comparable ways
- ii) It encompasses mental health and chronic morbidity (consequence of ill-health)

But too broad for a global measure!



2. Disability dimensions

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

Measure of participation

- 1. Measure of 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

Measure of functional limitation

- 1. Measure of 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 (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 (in Japan)?





Washington Group Questions

The next questions ask about difficulties you may have doing certain activities because of a HEALTH PROBLEM.

- 1. Do you have difficulty seeing, even if wearing glasses?
- 2. Do you have difficulty hearing, even if using a hearing aid?
- 3. Do you have difficulty walking or climbing steps?
- 4. Do you have difficulty remembering or concentrating?

Answer categories:

- a. No no difficulty
- b. Yes some difficulty
- c. Yes a lot of difficulty
- d. Cannot do at all



5. Instrument design: Participation restriction

Strategy:

- 1. Setting a technical **constraint**: **simplicity**
- 2. Including core conceptual characteristics:

Comprehensiveness + health-relatedness + normative comparison

3. Evaluating the necessity of each conceptual characteristic to obtain the most concise instrument possible

e.g. longstanding limitations: test whether adding a question or clause on duration has an added value as compared to no reference to duration,





6.Translation, testing, validation

Translation

Existing protocols: Euro-REVES method; Eurostat; European Social Survey

Testing

Use same protocol across countries

Existing protocols: ESS; SHARE; Washington Group

Field and cognitive tests in at least one language per language group

Testing should reveal that the instrument:

- i) measures participation restriction comprehensively;
- ii) is interpreted in a consistent way;
- iii) applies to whole population and to different survey modes.



7. Recommendation for implementation

Ideally, countries should use comparable:

data collection method
sampling design
sampling frame (inclusion of the institutionalized population)
question order
survey types (health vs. non-health survey)
sampling frames
use of proxy
and quality controls



Conclusion





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





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Thank you for your attention!

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