

June 2007

Ehemu Final Report
on
European Population Health



Executive Summary

Whether the extra years of life gained across the EU Member States are being spent in good or bad health is a crucial question both for individual Member States (MS) and the EU as a whole. This final report details the three years of work of the European Health Expectancy Monitoring Unit (EHEMU), a project funded by the EU Public Health Programme from 2004-2007. EHEMU was a collaboration between four teams based in: CRLC and the University of Montpellier in France; the University of Leicester, UK; the Scientific Institute of Public Health, Belgium; and the French National Institute of Demography, INED.

The main aim of EHEMU was to provide a **central facility** for the co-ordinated analysis and synthesis of life and health expectancies. This joint analysis of health and life expectancies adds a quality dimension to the quantity of life lived by the European populations. The results, the first utilising SILC data for the 25 MS, provide evidence of inequalities between MS in terms of health gaps and highlight potential targets for public health strategies both nationally and at a pan-European level.

EHEMU aims to contribute to improving and developing the European health monitoring system through collaboration with initiatives aimed at improving the quality and comparability of EU data, through its specific objectives to:

- undertake analysis of health expectancies from current harmonized data;
- co-ordinate the dissemination of results, through paper and web-based reports;
- act as repository for past and current data on EU health expectancies;
- undertake regular transfers of meta-information to European databases;
- develop web-based training material for interpreting and calculating health expectancies for a wide audience;
- promote harmonization of practice;

During the first year EHEMU produced material in four specific areas:

- **Three major reports** of analyses of health expectancies across the EU MS: the first, based on the European Community Household Panel (ECHP) was to support the promotion of Healthy Life Years as a new EU Structural Indicator; the second described more fully the results of these analyses, in particular identifying three different trend patterns in DFLE and LE; and the third extended analysis to different dimensions of health using the Eurobarometer. In all cases the limitations of the data are discussed and any caveats on interpretation.
- The template for **country reports** was developed. This four page flyer was designed to be easily accessible to a wide audience and documents the individual country's health and life expectancies over time and using different health dimensions as well as a profile of the EU as a whole.
- The **EHEMU website** was launched.
- Two networks (an **Experts Network** and a **Public Health Actors Network**) were created to assist EHEMU in disseminating results within MS, as a cross-validation of results and to link EHEMU's work through to public health policy and strategy

During the second year EHEMU produced material in six specific areas:

- The web-based **EHEMU Information System** was developed to facilitate the calculation of life and health expectancies in the 25 countries within the European Union. This

system, comprised a database (containing demographic and health questionnaire data) and an interface enabling analyses and calculations. The system was designed to be maximally user-friendly, with specific care taken to provide definitions of quantities calculated, underlying health surveys used and their questions as well as linking methods through to a Calculation Guide.

- **A major report** of analyses of health expectancies across the subset of MS using the Survey of Health and Retirement in Europe (SHARE). These analyses were undertaken due to the delay in receiving the first round of the Survey of Income and Living Conditions (SILC 2004). However, in addition to including the Minimum European Health Module (MEHM) that SILC would provide, SHARE included a wider range of health variables to compare MS.
- **The step-by step guide to calculating health expectancies (Calculation Guide)** was updated with more recent data and the methods revised to be consistent with the EHEMU Information System.
- The two networks (an **Experts Network** and a **Public Health Network**) were further consolidated to cover 24 countries. The networks were essential in evaluating the form and content of the first version of the **country reports** for 14 MS.
- The **EHEMU website** was further developed and contained the first year annual reports and a range of presentations of the EHEMU project.
- A **European conference** entitled Europe Blanche XXV1: Living Longer and Healthier Lives was organised by the Institut des Sciences de la Santé in Budapest with over 150 participants. The EHEMU project was the main focus of this meeting and provided three presentations:
 - Changes in life expectancy in the European Union since 1995 : similarities and differences between the 25 EU countries
 - Healthy Life Expectancy in the EU 15
 - Living longer healthier lives, comments on the changes in life expectancy and disability free life expectancy in the European Union since 1995

During the third year EHEMU produced material in six specific areas:

- SILC 2005, made available to EHEMU in March 2007, made it possible to produce the first issue of the **country reports** for all the 25 MS.
- Additional training material was developed to strengthen MS capacity to undertake health expectancy calculations, namely
 - A short guide to interpreting health expectancies (**Interpreting Guide**), aimed at policy-makers, journalists and other non-technical audiences;
 - A **glossary** of key definitions completed the Calculation and Interpreting Guides;
 - **SAS and SPSS programs** for computing health expectancies according to the Calculation Guide were written to extend the software tools available on the EHEMU website (training material).
- The two networks (an **Experts Network** and a **Public Health Network**) were updated and now cover the 25 MS.
- The **EHEMU Information System** was extended to include health data from the ECHP (1995-2001), Eurobarometer (2002, 2005), European Social Survey (2002, 2004),

SHARE (2004) and SILC (2004, 2005) providing health expectancies from all the sources, including the country reports.

- A **bibliographic database** of references to recent published documents on health expectancy calculations in MS completed the EHEMU Information System and provided references within the country reports to other values.
- A second version of the **EHEMU website** was released giving easy access to all the above.

Description of EHEMU tasks

The EHEMU project comprised 7 tasks:

- Task 1. Data analysis and annual calculation of selected health expectancies by sex and at specific ages and with confidence intervals for the 15 MS from harmonized data collected through existing European surveys: Eurobarometer (2002) and the Survey of Income and Living Conditions (SILC) from 2003 onwards and age and sex specific mortality data for the same time period. The selected indicators cover the spectrum of severity of disease and disability. As new harmonized data become available throughout the MS, appropriate health expectancies will be calculated and included in the suite of indicators. Both survey and mortality data will be obtained through Eurostat. In addition we will utilise the last data from the European Community Household Panel (2000 and 2001), which will be available from 2004.
- Task 2. Production of a detailed annual report on the quantity and quality of life in the countries of the Community, with comparative tables of indicators (and confidence intervals), maps and graphs of trends over time. MS will be given the opportunity to comment before the report is finalised on both the results for their country and on the quality, appropriateness and format of the report.
- Task 3. Production of an executive summary, for inclusion in the introductory chapter "Living longer, living better?" of an annual report on the health of Europeans.
- Task 4. Creation of a repository of existing calculations from MS (where data is not harmonized between MS) as well as ongoing collation of new calculations from future national and multi-national surveys, such as the Survey on Health, Ageing and Retirement in Europe (SHARE) with summary reports.
- Task 5. Developments of a website offering on-line assistance to calculate, analyze, interpret or use health expectancies. The website will provide permanent training so that a wide variety of audiences (statisticians, policy makers, journalists) may be informed when and where they require and will promote harmonization of practice. The website will also provide a vehicle for the widest dissemination of European comparisons of health expectancies throughout the countries of the Community. In the website development particular attention will be paid to the needs of the newly joining MS who have little or no experience in this field.
- Task 6. Production of two handbooks detailing the calculation and interpretation of health expectancies in Europe, Handbook 1: "Calculating health expectancies in

Europe" aimed at demographers, epidemiologists and statisticians and Handbook 2: "Interpreting and using health expectancies" aimed predominantly at policy makers. These handbooks will form the basis of on-line assistance (see 5.).

- Task 7. Transfer of meta-data, specifically detailed life and morbidity tables, to appropriate European databases and statistical systems and, with agreement by DG SANCO, to OECD and WHO (Copenhagen and Geneva).

Comparative table between the planned and the realised work: Year 1

Task	Period	Planned	Realized	
1	M1-8	Data Collection:		
		ECHP : 2000-2001	ECHP: 1995-2001	
		Eurobarometer 2002	Eurobarometer 2002	
		SILC 2003	Data not yet available at Eurostat	
		Calculations	At Birth	At Age 65
		1 ECHP: 2000-2001	ECHP: 1995-2001, plus extrapolations for 2002 and 2003	ECHP: 1995-2001, plus extrapolations for 2002 and 2003
		For 15 MS	+	+
		LE without Disability (Structural indicator)	+	+
		2. Eurobarometer 2002	At age 15	At Age 65
		For 15 MS	+	+
		LE in good perceived health	+	+
		LE without chronic disease	+	+
		LE without Disability	+	+
			Development of new generic indicator using the Minimal European Health Module	
			Calculations of Healthy Life Expectancies using this indicator.	Calculations of Healthy Life Expectancies using this indicator.
2	M7-11	Writing reports to member states	Layout of country reports defined	
			Calculations, tables and figures are made	
		Assessment by member states	Experts for assessment are identified and agreements are partly obtained The EHUMU-project has presented the results to the MS in the Task	
3	M11-12	Annual report	+	

		Executive summary	+	
4	M1-36	Collection of data	+	
6	M1-11	Development of Web site	+ for β version	
5	M5-15	First Handbook: due in the second year of the project	In progress	
7	M11-12	Transfer of Metadata for year 1	+	

Comparative table between the planned and the realised work: Year 2

Task	Period	Planned	Realized
1	M13-20	Data Collection:	
		SILC 2004	Data only obtained from Eurostat in Month 24
		Calculations	
		SHARE 2004	
		For 9 MS at age 65	+
		LE in good perceived health	+
		LE without morbidity	
		• Undiagnosed (symptoms)	+
		• Diagnosed	+
		LE without activity limitation (HLY)	+
		LE without physical functional limitations	+
		LE without disability	
		• Mild (IADL restrictions)	+
		• Moderate/severe (ADL restrictions)	+
2	M13-23	Country reports	Country reports prepared for 14 MS (those included in ECHP)

		Assessment by member states	Country reports and evaluation questionnaire sent to MS contacts in the two networks.
			Summary of responses from networks made
		Uploading of country reports to websites	Not completed due to views of MS that inclusion of Eurobarometer data too speculative
			Country reports presented to Experts and Public Health Networks in Budapest on 25-26 November, 2005 during the 26 th meeting <i>Europe Blanche</i> on Living Longer and healthier lives
3	M23-24	Annual report	+
		Executive summary	+
4	M13-24	Collection of data	EHEMU Information System developed
		Summary report	EHEMU Information System documented and presented to 2 nd Task Force on Health Expectancy June 2006
6	M16-23	Development of Web site	Only β version still currently available as website developer left team
5	M14-22	First Handbook	+
		Second handbook: to be commenced month 21	Not yet begun
7	M23-24	Transfer of Metadata for year 2	+

Comparative table between the planned and the realised work: Year 3

Task	Period	Planned	Realized
1	M25-29	Data Collection: SILC 2005	Data only provided by Eurostat in Month 35. Due to this delay it was agreed with SANCO and PHEA to extend the project (at no further cost) by 2 months

		Calculations	Completed in Month 36
		SILC 2005	
		For 25 MS at age 65	+
		LE in good perceived health	+
		LE without chronic morbidity	+
		LE without activity limitation (HLY)	+
2	M25-35	Country reports	Country reports prepared for 25 MS in Month 37
		Assessment by member states	Country reports and evaluation questionnaire sent to MS contacts in the two networks in Month 38. Summary of responses from networks will be completed by EHLEIS
		Uploading of country reports to websites	Not completed as data not yet finalised by Eurostat. Will be continued by EHLEIS with an expected date November 2007.
3	M35-36	Annual report	Completed in Month 38
		Executive summary	Completed in Month 38
4	M25-36	Collection of data	EHEMU Information System updated
		Summary report	EHEMU Information System updates presented to 3 rd Task Force on Health Expectancy December 2006
6	M28-35	Development of Web site	Finalised Month 38
5	M26-34	Second handbook	+
7	M35-36	Transfer of Metadata for year 3	Completed in Month 37

Commentary on the comparison between the planned and realised work

In general, the planned work was successfully completed:

Year 1

- the website was begun and a draft version was launched (Task 6)
- the handbook on calculating health expectancies was begun (Task 5)
- the data collection for the repository began (Task 4)
- metadata was transferred (Task 7)

Year 2

- the Expert and Public Health networks were further enlarged providing coverage of 24 MS (Task 2)
- the first versions (issue 0) of the country reports were completed for 14 MS and evaluated by the Expert and Public Health networks (Task 2)
- the handbook on calculating health expectancies was completed (Task 5)
- the EHEMU Information System was developed to provide data and calculations online and presented to the 2nd Task Force on Health Expectancy (Task 4)
- metadata was transferred (Task 7)

Year 3

- the website was completed (Task 6)
- the EHEMU Information System was extended to include SILC data (Task 4)
- the country reports (issue 1) were finalised for 25 MS (to be kept confidential as agreed at the 4th Task Force on Health Expectancy until values finalised by Eurostat, assessed by MS and agreed by SANCO) (Task 2)
- a bibliographic database of published reports of health expectancies from MS and a glossary of key definitions were added to complement the training material and country reports on the website (Task 6)
- the handbook on interpreting health expectancies was completed (Task 5)
- the Expert and Public Health networks were extended to cover the 25 MS (Task 2)
- metadata was transferred (Task 7)

Presentation of EHEMU

In addition to ongoing presentations at the Task Force on Health Expectancies, various Working Parties and meetings of the Network of Competent Authorities/Working Party Leaders, EHEMU team members have presented at:

- 18th World Congress of Gerontology, Rio June 2005
- European Population Day on Ageing as part of the IUSSP Annual meeting, Tours July 2005
- Gerontological Society of America annual meeting, Orlando, November 2005
- *Europe Blanche* on Living Longer and Healthier Lives, Budapest November 2005
- International Network on Health Expectancy and the Disability Process (REVES), Amsterdam May 2006
- International Network on Health Expectancy and the Disability Process (REVES), St Petersburg May 2007

Conclusion

The European Health Expectancy Monitoring Unit (EHEMU, 2005-2007) developed a comprehensive website (www.ehemu.eu) which includes the EHEMU Database and Information System, a collection of country reports, training materials and bibliographic tools.

- The EHEMU Information System collates European demographic and health data and provides online calculations on health expectancies, notably the Healthy Life Years (HLY) for the 25 MS.
- The four page country report documents an individual country's health and life expectancies over time and using different health dimensions (perceived health, chronic morbidity and activity limitation) as well as a profile of the EU as a whole. The country report template was designed to be easily accessible to a wide audience. One report has been produced for each of the 25 MS.
- The training material includes a step-by-step calculation guide with accompanying Excel spreadsheet, SAS and SPSS programs and a glossary of key definitions. It also includes an Interpreting Guide aimed at policy-makers, journalists and other non-technical audiences.
- Tools were developed to search the international REVES bibliographic database to enable specifically European published and grey literature on health expectancy calculations to feed into the country reports.

EHEMU has nurtured an Experts Network and a Public Health Network covering the 25 MS. The role of these Networks is to evaluate the form and content of the country reports and to act as an interface between EHEMU and the MS by bringing the national experience and disseminating the work of EHEMU.

EHEMU provided the lead and secretariat of the first four Task Forces on Health Expectancies, each meeting involving several members of the two Networks.

The European Health and Life Expectancy Information System project (EHLEIS, 2007-2010) that succeeds EHEMU will assume responsibility for upkeep of the website and Information System (retaining the name www.ehemu.eu), will produce an annual country report for each of the 27 MS and continue to lead the Task Force on Health Expectancies.

List of technical reports annexed:

- 2007-1: Interpreting guide
 - 2007-2: Country reports (Confidential)
 - 2007-3: Glossary
 - 2007-4: Bibliography
 - 2007-5: Network (Confidential)
 - 2007-6: SAS and SPSS programmes
 - 2007-7: Content of the Website (EHEMU-2)
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- Minutes of the steering committee meetings of year 3 (Confidential)