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THE EURO-REVES APPROACH: A VISION FOR EUROPE

Submitted by Euro-REVES projects [*]

SUMMARY

The Euro-REVES projects were set up to provide comparable health indicators across the whole of Europe that would address inequalities in the health of European populations. The whole process grew from and was built around the Euro-REVES network, the European arm of the International Network on Health Expectancy and the Disability Process (REVES). Although the focus of this network was to promote the use of health expectancy[1] as a population health indicator and provide comparisons of this indicator across Europe, it was soon recognised that comparability depended on harmonising not only underlying measures of health and indeed the

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[1] Health expectancies extend the concept of life expectancy to morbidity and disability and, being independent of the size and age structure of populations, allow -in theory- direct comparison of the different groups that make up populations (e.g. sexes, socio-professional categories, regions or countries) as well as estimating changes over time. The relevance of these indicators lies in their ability to simultaneously assess the evolution of mortality, morbidity and disability and thus to assess the likelihood of whether we are exchanging longer life for poorer health.

designs of the studies collecting the health information, but also the analytical methods. From May 2004, Euro-REVES enters a new stage of the process with the European Health Expectancy Monitoring Unit (EHEMU), funded under the new European Public Health Programme (2003-2008). EHEMU will provide a central facility for the co-ordinated analysis and synthesis of life and health expectancies in Europe. The conjoint analysis of health expectancies with life expectancy will add the quality dimension to the quantity of life lived by the European populations, providing evidence of inequalities between Member States (MS) in terms of health gaps and highlighting potential targets for public health strategies both nationally and at a pan-European level. Health expectancy is one of the new structural indicators for the EU sustainable development policy.

The stages of the Euro-REVES approach are detailed below:

STAGE 1. Identifying reasons for the incomparability of health expectancy calculations in Europe

The Euro-REVES projects began in 1995 as a Concerted action of BIOMED l (1995-1997), with the aim to harmonize population health indicators - and especially health expectancies, within the European Union. During this first stage Euro-REVES examined the incompatability of existing European health expectancy calculations and elucidated the solutions to make calculations strictly comparable from one country to another, taking into account the economic and the specifically European constraints. This was translated into three main goals: (1) the development of guidelines for the construction and calculation of health expectancies; (2) the provision of a European data base on health expectancies from the calculations made by members of the Concerted action teams; and (3) the preparation of a reference document describing concepts, questionnaires and calculation methods which could be used as a basis for the further promotion of calculations for other countries both within and outside Europe. Overall, 85 researchers, from a wide range of disciplines and representing 14 countries out of the then 15 (Luxembourg only was absent) participated to this concerted action.

After three years, Euro-REVES provided recommendations to improve the comparability of health expectancies in Europe and harmonization of health data collections (see Annex 1). Today, these recommendations still summarize the spirit of the Euro-REVES approach.

STAGE 2. Selection of a coherent set of health indicators for the European Union

Comparable health indicators across the whole of Europe are important to begin to address the inequalities in the health of our populations. Several years ago, the Regional Office for Europe of the WHO, as a part of Health for All, recommended common health instruments that should be included in European Health Interview Surveys. Most European countries run regular health interview surveys to monitor population health. However the longest established surveys, such as the United Kingdom General Household Survey, began before the current desire to harmonize health information within the European Union, and, as a result:

- countries with the longest experience tend to be the most reluctant to implement the recommended instruments;

- the relevance of previously recommended instruments was not always obvious to policy-makers who did however know the utility of their own national instruments;

- instruments were rarely accompanied by recommendations on the specific study designs to contain them, thus producing a further obstacle for comparability of the collected information;

- countries were not made aware of the implications when they amended the instruments (through question wording, selection of items, change in response categories).

To address these concerns for a particular set of population health indicators, health expectancies, the Euro-REVES 2 project, "Setting up of a coherent set of health expectancies for the European Union", was begun in 1997 under the European Health Monitoring Programme. Euro-REVES had already shown in Stage 1 that health expectancies were then available for 49 countries worldwide but their direct comparability was impossible due to the differing definitions, survey and analytic methodologies. The project aimed, therefore, to select a concise set of instruments from which a comprehensive set of health expectancies could be produced

As health expectancies combine life expectancy with a health indicator, there are as many possible health expectancies as health indicators. The profusion of possible indicators made it necessary for us to decide how to meet the main aim of the European Health Monitoring Programme, since **too many indicators may divert attention; too few indicators may hide the possible trade-off between the different facets of health as well as the effects.** We decided that it was important to define, at the outset, the conceptual framework for health we would work to and the selection of the domains in which we would develop instruments within the project. Another important facet of this work was to develop both **global** (single item) **instruments** and more **specific** ones, the briefer indicators providing the first overview comparison between countries or regions and the more specific indicators allowing a deeper understanding of differences. The project work fell into two phases, with the same methods and researchers, to cover the totality of the instruments.

Design of Euro-REVES 2

Euro-REVES 2 was made up of 7 research teams from six countries (Denmark, France, Italy, the Netherlands, Spain, United Kingdom) and the multi-disciplinarity, consisting of psychologists, statisticians, social scientists, demographers, epidemiologists, brought different strengths and approaches. After initial discussion meetings to choose and refine the common reference framework and domains (detailed below), the group split into the 7 teams to cover the main domains. The agreed remit for each team was to:

- systematically review research on the domain and measurement instruments, particularly wording, underlying concepts;

- review the relevant questions in European Health Surveys;

- recommend an instrument and any further work needed.

After the initial scoping of instruments and related research, each team presented their preliminary recommendations to the whole group and then to invited policy-makers from a range of countries for further input and agreement. Where other European groups were working on associated indicators, every effort was made to agree common instruments either through consensus meetings, for example in the field of mental health, or by working closely with the other group, for example chronic morbidity (EuroHIS project). In addition Euro-REVES 2 looked

closely at the choice of domains and terminology to be in keeping with the International Classification of Functioning, Disability and Health (ICF – World Health Organization, 2001), which was finalised during the project. Finally, the format of final reports of both phases and the presentation of the recommendations was given particular thought with work presented in a standard format.

The common reference framework and chosen domains

The profusion of health concepts, clearly illustrating the multi-dimensional nature of health, made it necessary first to clearly define a conceptual reference framework. The framework chosen was based on a life-course definition of health and the acknowledgement of different perspectives on health and approaches of assessing health status as well as the existence of specific conceptual models for each approach. The framework also acknowledges the importance of the dimension of mental health. The life-course definition of health is the justification for the use of health expectancies as fundamental health indicators for populations since health expectancies measure the lifetime spent in different health states.

The classical bio-medical approach, where psychological and social issues were barely acknowledged and mental illness represented a grey area, worked well when the most common diseases were infectious with known aetiologies. Following the epidemiological transition, the functional approach was developed over the last twenty years, mainly to assess the consequences of the emerging chronic morbidity on daily life. This disease/disability model formed the basis of the original ICIDH framework and is also the basis for the ICF. As well as developing **chronic disease** indicators to tap the beginning of the process, Euro-REVES 2 covered two key elements in the functional approach: body **functional limitations** including the brain (at the level of the person or organism) and **activity restrictions** (at the level of a life situation, i.e. a person in the society), in keeping with the approach and terminology of the ICF. Currently, public health is concerned with the future need for assistance that must be provided for the growing number of increasingly older individuals. It is important that the pathways to disability, through limitation to restriction in personal care activities are both included since knowledge of limitation early in the process will provide more effective intervention strategies to slow down the decline. Analysing information on functional limitations and activity restrictions together allows us to do this. The global instrument, the Global Activity Limitation Instrument (GALI) (see below) we proposed provides policy makers with easily obtainable information on the perception of limitations that could result in a need for support. The more specific instruments assess functional health (including the separate areas of seeing, hearing, mobility and agility) and activity restriction of a population independently of the level of development and social organisation of a country, in particular of the availability of special aids or human assistance.

The need to elicit an individual's assessment of their health status has been recognized in the perceptual approach with the notion of **self-perceived health** (assumed to be equivalent to the terms self-rated health, self-defined health and self-assessed health). Self-perceived health is important because of the way it complements functional health, being an independent predictor of survival in older people and associated with a number of other health outcomes and the use of health services. It is considered to be one of the best health indicators; the level of perception of bad health in the population is a clear indication of unmet needs, services and health care, at a global level. Self-perceived health should be clearly distinguished from self-reported health since, health which is perceived (or felt) by the individual and that reported are not always the same. As a consequence of disease, self-perceived health can be viewed as a subjective judgement on the

overall situation, a global self-assessment based on the internal assessment by the individual of specific health problems.

Mental disorders are now recognized as one of the principal causes of disability and they consume a significant proportion of the health budget in western countries. The World Health Organization has already set a series of specific targets for improving health in relation to **mental health** in Europe and a number of individual European countries have also individually set targets for mental health. Despite these targets, health surveys have not commonly included instruments to measure the mental health of their populations, partly due to difficulty but also to the stigma of mental illness perceived by individuals.

We focussed on these four domains: chronic morbidity, functional limitations, activity restriction and self-perceived health, recommending instruments, **both global and specific**. In addition we pay special attention to the dimension of mental health, largely forgotten in previous attempts at harmonization. As well as their inclusion in current health surveys, attesting to their relevance, these domains together with the instruments recommended and even the reasons for the choice of response categories have been defined in terms of their relevance to health policy. Our choice of domains and instruments provide a coherent yet comprehensive coverage of population health. This makes it possible at the same time to measure the extent of the differences in health between countries, to appreciate the causes, to specify the profile of each country and the differences between the various concepts of health. Moreover the choice of question forms and responses allows measurement of the gap between met and unmet need in a number of areas, thus providing potential solutions for policy-makers.

The proposed set of indicators

Over the last years a number of inventories of European health surveys have been made by several international organizations, including the WHO Regional Office for Europe, Eurostat, the European Health Monitoring Program (leading to the HIS/HES Database) and the OECD. At first sight, it appears that European health surveys all cover the same fields and often use the same questions. However the deeper analysis undertaken through Euro-REVES 2, in conjunction with current scientific research, underlined the significant differences that exist in the wording of existing questions. The main reason for this is the absence of two factors: firstly the absence of a rationale behind the questions and clearly demonstrated in the recommendations for their inclusion; secondly the absence of the science behind specific questions forms, more particularly the effect of changes in the wording on the responses.

Any instrument recommended to facilitate international harmonization, should have relevance for policy-makers at the national level and there seems little point in recommending instruments that do not substantially improve upon current recommendations where they exist. **Any recommendation should be accompanied by a plan of implementation as well as regular evaluation of the number of countries using the instrument and the quality of the information collected.** A further stumbling block to the adoption of recommended instruments by countries is the need to retain questions to protect the calculation of trends over time. To address this issue we intended to provide two types of each indicator: one at a **global** level, therefore being concise and requiring little room and time in surveys,to **describe** all the existing differences on this issue between the EU countries, whether they are due to " real " health problems, problems of social organization or culture; secondly, a more **specific** instrument to **explain** the differences between these countries. The central point of this set of indicators is that

an increase in the life expectancy with at least one chronic disease or with functional limitations does not necessarily imply an increase in life expectancy with activity restrictions. Between these two, lies the response of the health system in the broadest sense, with its successes and its failures, and this set of indicators aims also to measure these gaps between countries.

Our proposals acknowledged all these issues. Wherever possible, unless there was confusion with the current concepts of the field, instruments were based on existing recommendations, this being the case for "perceived health" where the question chosen was that already recommended by the WHO-Euro. For the measurement of disability, we proposed to update the long-term disability instruments of the OECD and the WHO-Euro, which mixed functional limitations and activity restrictions, to be more in keeping with the new ICF.

In total 10 instruments were proposed:

(1) a general question about chronic morbidity,
(2) a set of specific questions on chronic morbidity,
(3) a set of specific questions on physical and sensory functional limitations,
(4) a set of specific questions on cognitive functional limitations,
(5) a general question about activity restrictions,
(6) a set of specific questions on personal care activities,
(7) a set of specific questions on household activities,
(8) a set of specific questions on other activities of daily living,
(9) a general question about perceived health,
(10) a set of specific questions on mental health.

This coherent set of 10 instruments, the exact wording of which is publicly available,[2] will lead to many health state expectancies covering the totality of the conceptual framework of the measurement of population health. This number is a good compromise between too little and too many, making it possible at the same time to measure the extent of the differences in health between the European Union countries, to appreciate the causes, to specify the profile of each country and the differences between the various concepts of health: chronic disease, functional limitations, activity restrictions, mental health and health perceptions.

The Minimum European Health Module

The three global instruments (chronic morbidity, perceived health and activity limitation) have been defined as the Minimum European Health Module (MEHM) and unvalidated translations have been included in French, Belgian and Danish national surveys and in the Eurobarometer 2002. It is now included in the Survey on Income and Living Conditions (SILC), the new Eurostat survey.

[2] http://www.prw.le.ac.uk/reves

Minimum European Health Module (Version 2002)

1. How is your health in general? Very good / good / fair/ bad / very bad.

2. Do you suffer from (have) any chronic (long-standing) illness or condition (health problem)? Yes/ No.

3. 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.

STAGE 3. Development of the European Health Status Module (EHSM) for health and social surveys

In 2002, Euro-REVES proposed a plan for the development of health statistics in Europe paralleling the new European Public Health Programme (2003-2008). This plan, which has been accepted by the services of the Commission, was based on three main points: (i) the implementation of an European Health Interview Survey (EHIS) initially scheduled for 2006 (now expected 2007), and made of standardized modules and instruments, available from (ii) a repository of European survey instruments (initially called the Off-the-Shelf Instruments project), this whole forming part of a broader (iii) European Health Surveys System (EHSS).

According to this plan, the EHSS should comprise EHIS as the core coordinated by Eurostat and complementary special surveys to be developed within the new Public Health Programme (Sanco, 2003-2008). EHIS should be run every five years from 2007 onwards and include four core modules: a module on health status (EHSM), a module on health care (EHCM), a module on health determinants (EHDM) and a module of background variables (EBVM). All the survey instruments should be validated for European use and available in a repository of common instruments.

In 2002-2003 Euro-REVES developed the European Health Status Module (EHSM) for Eurostat, now available in 5 European languages, as a pilot module for the EHIS. The EHSM has been designed to be a free-standing, concise module that could be included to provide health information in non-health surveys such as a Labour Force Survey as well as being a core component of EHIS.

The module was mainly built from the 10 instruments selected during the second stage of Euro-REVES. Ultimately 9 indicators were chosen: chronic morbidity (global and detailed); activity limitation (global); perceived health (global); physical and sensory functional limitations; personal care activities; household care activities; other activities; mental health. A suitable instrument to measure cognitive functional limitations was not readily identified and this domain was omitted pending recommendations from the SHARE project.

Global and detailed indicators have been assembled into the EHSM in English and translation into other European languages. The English version of the Module was created by deciding the order of instruments and adding in introductory text and filters for rapid throughput in healthy individuals. The wording of some instruments has been modified following preliminary field trials within the SHARE project. As in the first stages of the work the translation process followed a strict protocol, set out to be reproducible by others:

- Translation guidelines were prepared so that translators understood and translated to the underlying health concepts

- Translators were chosen working in health research, mother tongue the target language and English as a working language

- Checkers with the same characteristics as translators judged the adequacy of the translation with reasons through completion of a questionnaire

- Checkers views and initial translation were brought together in a final translation.

Although a number of the initial instruments were already in use within European surveys, it was important that the above protocol was adhered to and that existing translations should not be assumed, since these existing translations had not been obtained with the underlying health concept in view. By the end of the second phase, the EHSM was available in 5 European languages: Danish, English, French, German and Italian. One of the problems encountered by the phased approach of this work is that the full module in the 5 languages, is now available on the WWW. This has meant that translations not adhering to the strict protocol may be made and it is imperative that fully validated translations in the remaining languages of the EU15 (and ACC) are completed as early as possible. When all translations are completed, it will then be possible to mount proper pilots in all countries to identical protocols using the correct versions of the module.

The systematic, protocol-driven approach taken in the development and translation of the EHSM provides a template for the remaining three core modules. Indeed it is crucial that even if existing items are taken from current European Surveys, existing translation are not taken but that translation guides are first produced that explicitly register the underlying concepts and their optimal measurement. If the guidelines produced by the EHSM are adhered to in the development of other modules, the result will be truly comparable health indicators for Europe.

STAGE 4. The European Health Expectancy Monitoring Unit (EHEMU)

The main aim of this new phase is to harmonize analyses and reports and therefore to provide a central facility for the co-ordinated analysis and synthesis of life and health expectancies. The conjoint analysis of health expectancies with life expectancy adds the quality dimension to the quantity of life lived by the European populations, providing evidence of inequalities between Member States (MS) in terms of health gaps and highlighting potential targets for public health strategies both nationally and at a pan-European level. Health expectancy, under the heading “Years of Healthy Life” is now one of the structural indicators for the EU sustainable development policy.

The specific objectives of the EHEMU are to:

- undertake analysis of health expectancies from current harmonized data, emphasising comparisons between MS and including quality (response rates) and explanatory background variables;

- co-ordinate the dissemination of these results, through paper and web-based reports with contributions to other reports on the health of the European population;

- act as repository for data on EU health expectancies, including past data, for comparison with the new emerging harmonised data;
- transfer regularly meta-information in the form of age and sex specific life and morbidity tables to European databases;
- develop web-based training material for interpreting and calculating health expectancies for a wide audience;
- promote harmonization of practice, setting a high level of professionalism for future calculations in Europe;
- contribute to improving and developing the European health monitoring system through collaboration with initiatives aimed at improving the quality and comparability of EU data.

CONCLUSIONS

Over the last decade Euro-REVES has worked systematically to address the problems in comparability of population health indicators in Europe, through the development of harmonized instruments, survey methods and analyses. The Group has brought scientific rigour to this important policy arena and endeavours where possible to disseminate to the widest audiences as well as submitting its methods to scrutiny through peer-reviewed academic journals. The Euro-REVES approach highlights the need for multinational and multidisciplinarity in monitoring health across Europe, with care and consideration for the national viewpoints and cultures yet drawing on the worldwide scientific literature. The whole process has taken considerable time, but is built on firm foundations.

Box : Euro-REVES acronyms

REVES: Réseau Espérance de Vie en Santé / International Network on Health Expectancy and the Disability Process

EHEMU: the European Health Expectancy Monitoring Unit

GALI: Global Activity Limitation Instrument

MEHM: Minimum European Health Module

EHIS: European Health Interview Survey

EHSS: European Health Surveys System

EHSM: European Health Status Module (for health interview survey)

SHARE: Survey on Health, Ageing and Retirement in Europe (5^{th} FP)

REFERENCES

Robine JM, Brouard N, Jagger C, Ritchie K, van de Water HPA. **Euro-REVES: a concerted action in support of harmonization of health expectancy calculations in Europe**. Final Euro-REVES Report. Montpellier, 1997.

Robine JM, Jagger C, Egidi V (Eds). **Selection of a coherent set of health indicators: a first step towards a user's guide to health expectancies for the European Union: final report of the Euro-REVES II project supported by the European Commission.** Montpellier: Euro-REVES, 2000. 192p.

Jagger C, Robine JM. **Report on consensus workshop on mental health**. Montpellier: Euro-REVES, 2001.

Robine JM, Jagger C, Romieu I (Eds). **Selection of a coherent set of health indicators for the European Union. Phase II: final report [of the Euro-REVES II project supported by the European Commission]**. Montpellier: Euro-REVES, 2002. 129p.

Robine JM, Jagger C, the Euro-REVES group. **Creating a coherent set of indicators to monitor health across Europe: the Euro-REVES 2 project**. *European Journal of Public Health*, 2003; **13**(3):6-14 .

Robine JM, Bonte J, Jagger C. **Towards a European health survey system**. Montpellier: Euro-REVES, 2002

Robine JM, Jagger C. **Report to Eurostat on European Health Status Module**. Final report of convention Eurostat n°200135100021. Montpellier: Euro-REVES, 2003. 123p.

Jagger C, Robine JM. **The health of adults in the European Union**. Luxembourg: European Commission, 2003. (Special Eurobarometer 183-7 / Wave 58.2 –European Opinion Research Group EEIG)

World Health Organisation. **International classification of impairments, disabilities, and health**. Geneva: WHO, 1980

World Health Organisation. **International classification of functioning, disability and health: ICF**. Geneva: WHO, 2001

Aromaa A, Koponen P, Tafforeau J, Vermeire (Eds). **Status and future of health surveys in the European Union: Final report of Phase 2 of the project Health surveys in Europe: HIS and HIS/HES evaluations and models**. Helsinki: KTL, 2003

Nossikov A, Gudex C (Eds). **EUROHIS: developing common instruments for health surveys**. Amsterdam: IOS Press for WHO Regional Office for Europe, 2003

ANNEX 1: Recommendations to improve the comparability of health expectancies in Europe and harmonization of health data collections:

R1: General recommendation: In the immediate future, considering the uncertainties and questions raised by the different ways that were examined and the various approaches proposed, we think it more sensible to follow all the courses simultaneously, combining approaches and coordinating the differents starnds.

Simultaneously follow the proposed courses: (i) towards a gradual harmonization of national health surveys through a periodical voluntary consultation of the different players; (ii) towards the standardization of some survey modules, protocols.... under the direction of a central organization such as Eurostat; and (iii) towards the harmonization of underlying concepts, of 'what we seek to measure', first through networks of researchers, such as Concerted Actions.

Combining the various approaches: (i) Global question including the whole relevant health topic and (ii) Series of detailed questions aiming to collect key information in order to build an indicator, as standardized as possible, covering the topic retained.

R2: To find the competent persons and help them communicate with each other: To take the time to find the competent persons, able to take the decisions required; to make sure that these persons will participate in the project until the objectives are reached; to make it possible for these persons to communicate using a language they master.

Whether considering the new WHO-Euro Project, EUROHIS, proposed to the DG/XII in the framework of BIOMED II, or the specific projects of the TF HIS concerning possible new instruments, we must remember what has occurred in the past. We must begin with identifying the most competent people and make sure they will participate in the project long enough to achieve the objectives and to enable them to communicate among each other. In particular, we must make sure that public health authorities (DG/V, national health ministries), health professionals (clinicians, public nurses ...) and European researchers' networks (BIOMED, DG/XII ...) working in the field have been contacted.

Competences must be connected to current phases or objectives, for example to develop ad-hoc survey instruments, to organize their validation or to introduce them into the existing surveys. It is very improbable that a person might both have the competences required and be able to take the decisions necessary to develop various specific instruments, to validate them or to introduce them into a national health survey.

We must also bear in mind that a person competent for a given problem is still very unlikely, in Europe today, to be fluent in English. To promote the use of the various European languages, even in the absence of simultaneous translators, would significantly improve the efficacy of the diverse initiatives.

R3: To distribute the work among the teams: Considering the work to be done and the small number of European public health experts, we should better co-operate and distribute the work among each other, making sure that no important point is neglected and that we do not drop uncompleted works. Nothing can be worse than networ ks which do not communicate with each other. We must interconnect the networks to be sure they are effectively aiming to the same objectives: that of better health information in Europe.

R4: To centralize collections: Centralizing collections, for example through Eurostat for surveys, would obviously increase their efficacy by reducing the number of non-responses, while limiting the working load of statisticians. The development of telematic networks should help solve this problem.

R5: To validate common instruments: Before they are standardized, common instruments must be validated. In particular, the effect of the survey presentation (introductory text of the questions, face to face interview, interrogation of a proxy, interview by phone, self administered questionnaire, computer-assisted interview...) must be carefully examined.

ANNEX 2: European Health Status Module (EHSM) Version 17-09-03

Introduction

We will now talk about your health. I will start with three general questions before asking you in more detail about your health.

(Mini European Health Module)

1. How is your health in general? *Very good/ good / fair/ bad / very bad.*

2. Do you have any long standing illness or health problem? *No/Yes*

3. For at least the last 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: *Severely limited/ limited but not severely/ not limited?*

(Chronic diseases)

Here is a list of health problems. For each of them can you tell me whether you have ever had them and also whether you have had them in the past year.

4. a) Do you have or have you ever had - *asthma*? Yes/No
[If No, go to next item]

[Only for asthma] : Is it allergic asthma? Yes/No

b) Was this condition diagnosed by a doctor? Yes/No
c) Have you had *asthma* in the last 12 months? Yes/No
d) For this condition did you take drugs or have been under therapy in the past 12 months? Yes/No

Repeat for all the following items:

Allergy (excluding allergic asthma)
Diabetes
Cataract
Hypertension (high blood pressure)
Heart attack
Stroke, cerebral haemorrhage
Chronic bronchitis, emphysema
Arthrosis, (rheumatic) arthritis
Osteoporosis
Gastric or duodenal ulcer
Malignant tumour (including leukaemia and lymphoma)
Migraine or frequent headache
Chronic anxiety or depression
Other (specify)

(Physical and sensory functional limitations)

Now I want you to think about situations you may face in everyday life. Please ignore any temporary problems.

5. Can you *clearly see newspaper print* without *glasses* or any other aids or devices? Yes / No*
If no: Can you *clearly see newspaper print* with your glasses or other aids or devices?
Yes / No / Has no glasses or other aids/devices
** if answer "I am blind or I cannot see at all", go to hearing item (skipping other questions on seeing)*

Repeat for all the following items:

Clearly see the face of someone 4 metres away (across a road)
Distinctly hear what is said in a conversation with several persons (people)[3]
Distinctly hear what is said in a conversation with one other person
Without difficulty walk 500 metres
Without difficulty walk up and down a flight of stairs
Clearly speak to others [for answer by proxy or interviewer only][4]
Without difficulty bite and chew on hard foods such as a firm apple
Without difficulty reach out (stretch out an arm) to shake someone's hand
Without difficulty use fingers to grasp or handle a small object like a pen
Without difficulty turn on a tap or unscrew the lid of a jar of coffee
Without difficulty bend and kneel down
Without difficulty lift and carry a full shopping bag weighing 5 kilos

(Personal Care Activities)

Now think about your personal care activities in everyday life, such as feeding yourself, getting in and out of bed, dressing and undressing, bathing or showering, using toilets. Again please ignore temporary problems.

FILTER 1. Do you, usually, perform all personal care activities without any difficulty? Yes/No/Uncertain[5]

[if Yes go to next section]

6. Do you, usually, *feed yourself* completely on your own?
(i) Yes – I do it completely on my own
(ii) No – I do not do it completely on my own

[if (i) go to a)]
[if (ii) go to c)]

a) Do you *feed yourself* without any difficulty?
(i) Yes – I do it without any difficulty
(ii) No – I do it with (some) difficulty

[if (ii) go to b)]

b) Do you require help in *feeding yourself*?
Yes/No

[Go to next item]

[3] If can distinctly hear conversation with several persons without any devices then can skip 'one person' question.
[4] Ask only of proxy or interviewer complete. Consider only physical reasons and not difficulties due to differences between the subject's first language and the language of the proxy or survey.
[5] If respondent hesitates or shows uncertainty then continue with detailed questions

c) Do you *feed yourself* with help?[6]
(i) Yes – I do it with help
(ii) No

d) Is the help you receive in *feeding yourself* sufficient for your needs?
Yes/No

Repeat for all the following items:
Transfer in and out of bed
Dress and undress
Use toilets
Bath or shower.

(Household Care Activities)

Now think about your activities at home in everyday life such as shopping, preparing meals, doing housework, doing the laundry, taking care of financial matters or using the telephone. Again, please ignore temporary problems.

FILTER 2. Do you, usually, perform such activities without any difficulty? Yes/No/Uncertain[7]

[if Yes go to next section]

7. Do you, usually, *prepare meals* completely on your own?
(i) Yes – I do completely on my own
(ii) No – I do not do it completely on my own[8]

[if (i) go to a)] [if (ii) go to c)]

a) Do you *prepare meals* without any difficulty?
(i) Yes – I do it without any difficulty
(ii) No – I do it with (some) difficulty

[if (ii) go to b)]

b) Do you require help in *preparing meals*?
Yes/No

[go to next item]

[6] Can also ask WHO if receives help. Allows complementary questions on use of special equipment: Do you (also) use special equipment Yes/No. The use of personal help or aids or adaptations are collected separately.
[7] If respondent hesitates or shows uncertainty then continue with detailed questions
[8] This may include division of the activity within a household.

c) Could you do it completely on your own without any difficulty if you had to or wanted to?

(i) Yes – I could do it on my own without any difficulty
(ii) No – I could not do it on my own without any difficulty[9]

[if Yes go to next item]

d) Do you *prepare meals* with help?
(i) Yes – I do it with help
(ii) No – I do not do it

e) Is the help you receive in *preparing meals* sufficient for your needs?
Yes/No

Repeat for all the following items:

Use the telephone
Do all the shopping
Do occasional heavy housework
Do the laundry
Do routine light housework
Take care of or manage your financial matters.

(Other daily activities)

Now think about your other activities in everyday life. Again ignore temporary problems.

8. As a result of your health or the way you feel, do you have any difficulty with <u>your usual school or work activities</u> or have you had to cut them down?

(i) Yes – I have difficulty with my usual school or work activities
(ii) No – I do not do have difficulty with my usual school or work activities
(iii) Not applicable [10]

[if Yes go to a), otherwise, go to next item]

a) Do you use special equipment to <u>do your usual school/work activities</u> Yes/No
b) Do you received special assistance to <u>do your usual school/work activities</u> Yes/No
c) Are there any remaining problems in <u>doing your usual school/work activities</u> to your satisfaction that you require (more) help with? Yes/No

Repeat with items:

Usual leisure and social activities
Going where and when you want to go

(Mental health)

Finally I want to ask you about your feelings and mood over the last month.

[9] This means: I could not do it on my own or I could do it on my own but with difficulty.
[10] NA= Not applicable: Not at school/work for reasons other than health reasons.

9. How much, during the past 4 weeks *did you feel very nervous*?
All of the time/Most of the time/Some of the time/A little of the time/None of the time

Repeat for all the following items:

Have you felt so down in the dumps, nothing could cheer you up?
Have you felt calm and peaceful?
Have you felt down-hearted and depressed?
Have you been happy?
Did you feel full of pep?
Did you have a lot of energy?
Did you feel worn out?
Did you feel tired?

10. Would you describe yourself as being usually":
(i) happy and interested in life,
(ii) somewhat happy,
(iii) somewhat unhappy.
(iv) unhappy with little interest in life, or
(v) so unhappy that life is not worthwhile?

ANNEX 3: The health of adults in the European Union

Between 28th October 2002 and 8th December 2002, the European Opinion Research Group carried out wave 58.2 of the Standard Eurobarometer, on request of the European Commission. This wave covered health questions

The health of the European population was assessed on five levels: perceived health, chronic morbidity (long-standing illness), activity restriction due to a health problem, sensory and physical functional limitations. The questions were developed by the Euro-REVES group and the first three formed the Minimum European Health Module. All questions were satisfactorily understood although almost half the Swedish respondents answered "don't know" to the far vision question, much higher than the 1-2% in other Member States and for all other questions.

The vast majority (67.8%) of Europeans aged 15 years and over considered themselves to be healthy, only 5.7% perceiving themselves to be in bad or worse health. A quarter (25.3%) reported chronic morbidity and a quarter (26.3%) had activity restriction with 6.2% severely restricted. Low levels of sensory functional limitation were reported (1.3% near vision, 3.4% far vision and 3.0% in hearing), though without the use of aids 42.1% were limited in near vision, 21.1% in far vision and 4.5% in hearing. Physical functional limitations were more common with 3.6% limited in walking 500 metres even with an aid, 9. 6% in climbing stairs and 10.5% in lifting 5 kilos.

There were considerable age differences. Of those aged 65+ years, only 39.9% rated their health as good or better, almost half (48.3%) had chronic morbidity and half had activity restriction. Limitations in hearing even using aids were reported more often (7.3%) than those for near vision (3.3%) or far vision (6%). Physical limitations in this age group were highest for lifting (29.5%) and stairs (28.6%) with 10.7% limited in walking even with aids.

Three and fourfold differences between Member States were seen in some health variables, the greatest differences being in bad or worse perceived health (range 1.3% to 13.6%), hearing (1.3% to 5.2%) and walking limitation despite aids (1.4% to 8.5%).