Establishment of a set of mental health indicators for European Union
Final Report

based on the Agreement No SOC 98 201412 05F03 (98CVVF3-509-0)
between the Commission of the European Communities and
the National Research and Development Centre for Welfare and Health STAKES
List of abbreviations appearing in text

COD = Cause of death
DDD = Defined daily doses
ECHI = European Community Health Indicator (project)
ECHP = European Community Household Panel
EMCDDA = European Monitoring Centre for Drugs and Drug Addiction
EU = European Union
EU-DGV = refers to the organisation currently named as: Directorate General Health and Consumer Protection
Euro-REVES = European Network for the Calculation of Health Expectancies
Eurostat = the statistical department of the European Commission
HES = Health examination survey
HIEMS = Health Indicators Exchange and Monitoring System
HIS = Health Interview Survey
HMP = Health Monitoring Project
ICD = International Classification of Diseases
OECD = Organisation for Economic Co-operation and Development
PYLL = Potential years of life lost
SF-36 = Short-form 36 (36 item survey generic health measure)
STAKES = National Centre for Research and Development in Welfare and Health in Finland
WHO = World Health Organisation
WPA = World Psychiatric Association
Introduction

Background for the project to establish a set of mental health indicators

In the 1990s, mental health issues have received increasing attention across Europe and indeed the whole world. Mental ill health has become a major public health concern. Epidemiological studies conducted have shown that up to one fifth or one quarter of the general population suffer from some sort of mental disorder at a given time. Up to half of the population may be at risk of contracting a mental disorder at some point during their lifetime. Moreover, disability due to psychiatric disorder has received increasing attention since the Global Burden of Disease report. A quarter of all morbidity was attributed to psychiatric illnesses and major depression as cause of disability was ranked fifth.

According to the Key Concepts project\(^1\) supported by the European Commission and the Consultative Meeting "Promotion of Mental health on the European Agenda" held in January 1998, development of mental health indicators was one of the priority areas of action in the field of promotion of mental health in Europe.

The Health Monitoring Programme (HMP) of the European Commission was established in 1997. This was preceded by enhancement of the public health responsibilities of the European Union. The HMP has the aim ‘to contribute to the establishment of a Community Health Monitoring System’. The activities of the HMP are conducted under three headings, or pillars:

Pillar A: Establishment of Community Health Indicators (indicator projects)
Pillar B: Development of a Community-wide network for sharing health data (HIEMS)
Pillar C: Analyses and reporting (health reports)

The project

Since the beginning of 1999, STAKES (The National Centre for Research and Development in Welfare and Health in Finland) has coordinated under the EC Health Monitoring Programme a project to establish a set of a few good indicators to monitor mental health in Europe. The project has had participants from all the EU Member States and Norway. A group of Active Partners from seven countries have collaborated more closely during the work. The project was finished by 15 November 2001. (See Appendix 1. for names of the participants and Appendix 2. for the time schedule of the project).

The project has collected information on existing mental health and well-being indicators and information systems. Furthermore, the partners have selected, as their proposal, a set of mental health indicators, which can be integrated into European a comprehensive health monitoring system. Clear and unambiguous definitions have been pursued when devising the set of indicators.

The project has additionally sought out to test the validity, reliability and comparability of the drafted set of indicators by collecting data from existing data sources and conducting a pilot survey.

The present report is the final report of both of the project aiming at establishing indicators for mental health in Europe.

**The basic starting points**

As a comprehensive health monitoring system must cover the multiple aspects of mental health, the following points have been considered while outlining the set of indicators:

a) The mental health indicators with unanimous definitions must describe the important aspects of mental health (e.g. affective experiences and emotional resilience) as well as its interactional and societal prerequisites or consequences (e.g. social environment, level of well-being, quality of life).

b) The system must be sensitive to change within time and cultural differences.

c) Different mental health activities (promotion; primary, secondary and tertiary prevention; and prevention of excess mortality) must be covered by the system.

d) The set of mental health indicators will be an integrated part of a comprehensive community health monitoring system. The indicators must provide comparable and reliable data of mental health in the Member States. Ideally the indicators would be based as much as possible on data already collected routinely in the Member States.

e) The system should include indicators to describe relevant and feasible aspects of the mental health service system.

f) The system must have relevance for planning and political decision making.

g) Citizen's participation and user's views are increasingly important elements in mental health today. These have to be taken into account if the needs of the population at large are to be served in the best possible way.

A set of mental health indicators will serve both the European Commission and EU Member States enabling the satisfactory follow up of the mental health situation of populations. A common set of indicators facilitates establishment of joint efforts in the field of mental health, comparison of policies and activities in different Member States as well as evaluation and
dissemination of good practices. The deliverables of the mental health indicators can also be used in the joint effort to enhance the visibility of mental health issues in the European context. These indicators can be used in defining the minimum amount of data needed for monitoring community mental health.

Implementation of the Project

The Tasks

Implementation of the Project has involved the following tasks as stated in the Project Plan:

Workshops and meetings with Project Partners and representatives of other relevant organisations (WHO-Euro; Eurostat; and EURO-Reves) have gathered together to discuss and formulate the indicators needed, their definitions, and to agree upon a proposal of the set of mental health indicators. The workgroup of Active Partners has been responsible for most of the practical work needed. The National Contact Points have provided useful national information from the Member States and critical comments on the outcomes of the project.

Relevant information has been collected on mental health indicators and databases from different sources including the literature, national information systems, international organisations and various research and development programmes.

Expert consultations and work on specific questions; some top European experts in the field have been contacted by the Project to ensure the best possible expertise.

Preparation of interim reports, two interim reports have been prepared for administrative purposes: by the 15th of December 1999 and by the 15th of December 2000.

Workshops and meetings with project partners

During the project the Active Partners have assembled for meetings six times (three of the meetings were held together with the National Contact Points). Additionally, the project had a concluding seminar in November 2000 together with the Mental Health on the European Agenda –project (see Table 1.). Representatives of the European Commission were present at the Luxembourg and Paris meetings to clarify the expectations of the Commission. The European Network for Mental Health Policy (ENMHPO) has
had a role as the supportive body for the Project, and several of its members serve as representatives of the National Contact Points.

During the initial meetings, the objectives of the project and a preliminary time schedule for the project were outlined. Work was started on the definition of mental health (in its complete version it is included in the comprehensive list of mental health indicators). Two strategies to formulate the set of indicators were chosen: 1) to find out what is already collected in the Member States on mental health, and 2) to define what would be theoretically the best set of mental health indicators. Relevant aspects of mental health, i.e. the possible future domains of the indicators, to guide their selection were outlined. The quality criteria for selection of the indicators were likewise drafted. The following points were emphasised: 1) availability, 2) coverage, 3) comparability, and 4) feasibility (acceptable to the Member States). However, the participants noted that most likely a need to develop some new indicators exists. This would mean development of methods to be suggested for health surveys in the future. It was agreed that collaboration was needed with at least two other projects funded by the EU Health Monitoring Programme: “European Community Health Indicator project (ECHI)” and the “Health Surveys: Content and Data (HIS/HES project”.

The project coordinator (STAKES):

a) Has drafted a questionnaire (see Annex I) and collected data from the Member States;

b) Has been in touch with the relevant international organisations (WHO-Euro, OECD, Eurostat and EMCDDA) and assessed the health data they collect;

c) Has been in contact with representatives from the ECHI; HIS/HES; the Alcohol Consumption project and EURO-Reves projects.

Table 1. Meetings held by the project

<table>
<thead>
<tr>
<th>When and where</th>
<th>Present partners</th>
<th>Main topics</th>
<th>Guests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brussels 30. 3. 1999</td>
<td>Active Partners</td>
<td>Outline of the project: areas to cover by indicators &amp; quality criteria; definitions of concepts</td>
<td>None</td>
</tr>
<tr>
<td>Brussels 10.5. 1999</td>
<td>Active Partners, National Contact Points</td>
<td>Time schedule; quality criteria; areas to cover; questionnaire for data collection</td>
<td>WHO-Euro: Rachel Jenkins (UK); Ministry of Social Affairs and Health: Eero Lahtinen (FIN)</td>
</tr>
<tr>
<td>Luxembourg 9. – 10.9. 1999</td>
<td>Active Partners</td>
<td>Preliminary results of data collection; Cooperation with Eurostat; draft of interim report</td>
<td>European Commission: Matti Rajala, Henriette Chamouillet; Eurostat:</td>
</tr>
<tr>
<td>Date</td>
<td>Location</td>
<td>Participants</td>
<td>Topics</td>
</tr>
<tr>
<td>--------------</td>
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<td>---------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Tampere 11.10. 1999</td>
<td>Active Partners</td>
<td>Preliminary results of data collection; assessment of the literature review; interim report</td>
<td>Marleen DeSmedt (Not at the actual meeting, but several international experts present at the workshop on mental health indicators, e.g. Gyles Glover)</td>
</tr>
<tr>
<td>Paris 17. – 18.2. 2000</td>
<td>Active Partners, National Contact Points</td>
<td>Draft of a set of mental health indicators; Cooperation with WHO; Assessment of the literature review</td>
<td>European Commission: Henriette Chamouillet; WHO-Euro: Wolfgang Rutz; EURO-Reves: Karen Ritchie</td>
</tr>
<tr>
<td>Utrecht 30. – 31.5. 2000</td>
<td>Active Partners</td>
<td>Definitions and descriptions of the draft list of indicators reviewed; Incorporation of indicators in the ECHI format; definition of mental health</td>
<td>None</td>
</tr>
<tr>
<td>London 6. – 7.9. 2000</td>
<td>Active Partners, National Contact Points</td>
<td>Feasibility of the set of mental health indicators; final report; possibility of piloting the set of indicators</td>
<td></td>
</tr>
<tr>
<td>Helsinki 17. – 18.11. 2000</td>
<td>Joint concluding seminar with the agenda project</td>
<td>Presentation of the outcomes of the project; comments by experts</td>
<td>Several internationally renowned speakers</td>
</tr>
</tbody>
</table>

**The pilot survey:** Definition of a set of mental health indicators was followed by pilot implementation of the indicators. The pilot implementation aspired to enable evaluation of whether the indicators 1) provide a measure of variability between the Member States, and 2) have relevance for the aims of the above-mentioned activities followed.

The possible problems in data collection were compared and analysed between the countries. The usefulness of the information provided by the indicators in practical settings has also been evaluated. The material provides
a reliable means to estimate comprehensively the comparability of the indicator set in practical settings.

Participants: The test phase of the implementation of the set of mental health indicators involved five of the Partners (France, Germany, Greece, Finland, and Norway) of the Mental Health Indicator Project.

Workshops and meetings: Two meetings of the project partners and two additional teleconferences to discuss and agree upon the phases of implementation.

<table>
<thead>
<tr>
<th>When and where</th>
<th>Present</th>
<th>Topics</th>
<th>Guests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brussels 31.1. 2001</td>
<td>Project partners except Greece</td>
<td>Results of the collection of the available data; Issues regarding pilot survey of mental health indicators; Budgetary issues</td>
<td>European Commission: Henriette Chamouillet</td>
</tr>
<tr>
<td>Teleconference 20.3. 2001</td>
<td>Project partners except Greece (not yet included)</td>
<td>Finishing the survey sheet; Progress reports regarding practical issues; Greece to replace the Netherlands</td>
<td>None</td>
</tr>
<tr>
<td>Teleconference 29.5. 2001</td>
<td>Project partners (Greece included)</td>
<td>Progress reports of the survey; Analysis and format of data</td>
<td>None</td>
</tr>
<tr>
<td>Brussels 25.9.</td>
<td>Project partners</td>
<td>Review of the data collection and results of the pilot survey</td>
<td>European Commission: Henriette Chamouillet</td>
</tr>
</tbody>
</table>

Preparation of the final report: The present paper is the final report, which includes the proposed set of mental health indicators with specific definitions guidelines for their use and list of priority of the indicators (see Annex II, III and IV).

Definition of concepts

The concepts of “mental health”, “health indicator” and “mental health indicator” have been used during the process of formulating the set of indicators. The following is a short presentation of the central concepts.
Mental health\(^2\) has two dimensions: 1) **Positive mental health** can be conceptualised as a value in itself or a resource including ability to cope with adversity and avoid breakdown or diverse health problems when confronted with distressing experiences; 2) **Negative mental health** is concerned with mental disorders, symptoms and problems. Mental health, as an indivisible part of general health, reflects the equilibrium between the individual and the environment. It is influenced by: 1) individual biological and psychological factors; 2) social interaction; 3) societal structures and resources; and 4) cultural values. In this context, mental health can be seen as a process that comprises predisposing, actual precipitating and supporting factors as well as various consequences and outcomes (see Figure 1.).

The topic of mental health is, however, very complex as most mental disorders are multifactorial in their aetiology, a multitude of risk factors may influence the onset, course and restitution of one disorder and a risk factor may be common for many forms of ill-health, both somatic and mental illnesses. Furthermore, mental retardation and dementias have not been dealt with in this project. Most of these conditions are also in treatment systems taken care of by other than the mental health sector, e.g. primary health care and neurology.

**Health indicator** indicates aspects of the state of health in the community. A health indicator could be conceptualised as a bridge between health policy and science, e.g. epidemiology. Proper guidelines should be provided to interpret the trends established. Furthermore, one needs a conceptual model of health and mental health to facilitate an interpretation of a trend established by an individual or a group of indicators. **Health-care indicator** reflects aspects of the state of health care in a community. **Mental health indicator** is defined as measure on the state of mental health; it is a variable that has been related to mental health and indicates a priority or a problem. These may be items in health surveys or statistical data collected routinely and are often repeated measures. It is important to remember that various things may affect one single indicator. **Monitoring mental health** is defined here as systematic, repeated measures of matters related to the mental health of the population. Monitoring includes the follow-up of the measures with the purpose to interpret the evolution of mental health situation according to the established policies and strategies, and to take relevant actions if necessary.

\(^2\) A more thorough description of the concept is included in Annex I.
Areas covered by the indicators

The project for European Community Health Indicators (ECHI) has grouped the future health indicators in the HIEMS system into the following four categories (Table 2.):

Table 2. Indicator domains in the future Health Indicators Exchange and Monitoring System (HIEMS) and the sub-domains that will include specific mental health indicators

<table>
<thead>
<tr>
<th>Main categories of health indicators proposed for ECHI</th>
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<tbody>
<tr>
<td>1. Demographic and socio-economic factors</td>
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<tr>
<td>2. Health status</td>
</tr>
<tr>
<td>Cause-specific mortality</td>
</tr>
<tr>
<td>Morbidity, disease specific</td>
</tr>
<tr>
<td>Morbidity, generic</td>
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<tr>
<td>3. Determinants of health</td>
</tr>
<tr>
<td>Personal conditions</td>
</tr>
<tr>
<td>Social and cultural environment</td>
</tr>
<tr>
<td>4. Health systems</td>
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<tr>
<td>Prevention, health protection and health promotion</td>
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<tr>
<td>Health care resources</td>
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<tr>
<td>Health care utilisation</td>
</tr>
<tr>
<td>Social services and welfare</td>
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<tr>
<td>Expenditure</td>
</tr>
<tr>
<td>Health care quality indicators</td>
</tr>
</tbody>
</table>

The state of mental health, including various levels of ill-health, health and well-being, is the most important domain to be covered by the set of indicators. Furthermore, the aspects of mental health central to its definition...
are in need of indicators: 1) predisposing factors, 2) precipitating factors, 3) social interaction, 4) individual resources and 5) individual experiences. (These factors are also definable as determinants). Also health-care indicators have been considered valuable.

**Quality criteria for the indicators**

In addition to what has been stated in the introduction, mental health indicators maximally feasible and acceptable for the use of different Member States have been pursued. The list of mental health indicators includes statements of the reasons why they have been selected. Besides mental health policies, attention has been paid to the relevance of the set of indicators proposed for practical purposes. This has meant that the indicators should 1) provide a measure of variability between the Member States, 2) be sensitive to changes over time and 3) have relevance for the aims of the activities (especially promotion of mental health) followed. The indicators should be specific, reliable, valid, cost-effective and ethical. In practice, however, no indicator will meet all the criteria at the same time.

**Collection of relevant information**

**National mental health data**

The survey of mental health data collected in the Member States and Norway included a non-comprehensive list of examples of indicators regarding domains of sociodemographic; social networks and stressful events; positive mental health; subjective experience of the individual; services and their supply, use and demand; morbidity and disability; and mortality. Data were additionally collected of the existence of comprehensive mental health monitoring systems. Information was inquired of a) the definitions of the indicators, b) how the data is collected, c) how it is utilised (for which purposes and in which manner), and d) and experiences on the particular monitoring system or indicator in question. The questionnaire was sent to the Active Partners and National Contact Points to fill in. In addition, the project partners were asked to provide any relevant material, survey questionnaires, reports etc., whether in native or other language.

General information on the results:

Thirteen out of the 16 participating countries returned the questionnaire completed. No response was received from: Spain, Portugal and Ireland. Letters to remind of the query were sent three times.

Comparable survey measures on mental health or its determinants were lacking, although some Member States conduct some surveys inquiring on “social support”, “life events”, “common mental morbidity” and “positive mental health”. For many of the factors that belong to the domain of demographic and socio-economic factors, there was available data at the membership level. Moreover, data on mortality due to suicide and events with undetermined intent are available at the national databases.
These data are mostly based still on the ICD-9 classification system. Due to cultural reasons there may be countries, where for religious reasons the suicide figures may not be as reliable as in other countries. Data on health systems are available at national level. The health care systems, however, differ considerably from each other and therefore the concepts regarding the resources (e.g. “bed” and “psychiatrist”) do have varying definitions making it cumbersome to compare the data. Each country does have a national or regional database on both outpatient and inpatient service use. Expenditure data is, likewise, recorded in national databases. All in all, not much comparable data on mental health is collected in the EU. Altogether, five countries reported of a monitoring system for mental health.

Data on the indicators, comparability and availability used in each country are described in the Annex V.

**Review of the literature**

The project coordinator has also conducted a literature review on the topic of “Measuring Aspects of Mental Health” to provide up to date scientific background information. A summary of the abstract is presented in the following:

The review of current scientific literature seeks associations between mental health, psychological distress and mental disorders on the one hand and different individual, social, economic, ecological and service-related characteristics on the other. The focus is on the appraisal of mental health at population level, giving special weight to an assessment useful for mental health promotion. This has naturally influenced the selection of the reviewed literature as emphasis has been put on large-scale outcomes and correlations (between determinants and mental health) instead of assessment of individual psychopathology. The review has neither concentrated on the care system outside the viewpoint of service use. Substance abuse and organic disorders are not dealt with in this review, as the project itself does not focus on these phenomena.

An abundance of scientific literature exists on the subjects dealt with. The focus is primarily on some of the older key investigations and on data accumulated during the last five to six years. Literature searches were conducted through the MEDLINE, PSYCHLIT and SOCIOLOGICAL ABSTRACTS databases. Available reviews and textbooks were also made use of. The research findings cited outline specific areas as key starting points in establishing a set of mental health indicators. Such indicator areas have been provisionally grouped in the following manner: Sociodemographic; Social Networks; Positive Mental Health; Subjective Experience of the Individual; Services and their Supply, Use and Demand; Morbidity and Disability; and Mortality.

**Data from international organisations**

Various international organisations collect health data that is relevant to mental health and to development of the monitoring system. The WHO-Euro, OECD and Eurostat were contacted and asked to provide any material on the health data they collect. WHO focuses on developing survey instruments, Eurostat on finding ways to implement them, and the OECD on health care
data. IDA-project in the EC aims at developing one database for EC, WHO, OECD and Eurostat.

Eurostat:

Eurostat has recently (Hupkens 1997, EC) published results of an investigation on the Coverage of health topics by surveys in the European Union. This report provides extensive information on all European surveys concerning matters of health. In addition, Eurostat conducts the European Community Household Panel (ECHP), which probes self-reported health in the EC. Eurostat is collecting in 1999 data from national health surveys on 12 selected topics. Eurostat collects statistical information on: 1) causes of death (COD) and 2) data on health care (see Appendix 3. for data collected by Eurostat).

According to the report by Hupkens, 26 surveys conducted repeatedly in 13 European countries contain questions regarding mental health (topics: stress, tiredness, nervousness; anxiety; sleeping disturbance; thoughts of suicide). Self-perceived health is inquired in 37 surveys in 16 countries, social network in 15 surveys in at least 10 countries, participation/integration in 3 surveys, consumption of alcohol in 31 surveys in at least 16 countries, heavy drinking in 11 and frequency of drunkenness in 7 surveys. Use of narcotics/psychotropic substances is inquired in 9 surveys in at least 8 countries, abuse of alcohol/pharmaceutical products in 3 surveys, and misuse of chemical due to drug dependency and exposure to drugs in 3 surveys.

WHO-Euro:

At the forty-eighth session of the WHO Regional Committee for Europe, in September 1998, Member States adopted the new health policy “Health21- the health for all policy framework for the WHO European Region- 21 targets for the 21st century”. The meeting agreed to continue to regularly monitor and evaluate progress towards health for all (HFA), using appropriate set of common HFA indicators. Two of the targets concerned directly mental health (numbers 6 and 12). Target 6: “By the year 2020, people’s psychosocial well-being should be improved and better comprehensive services should be available to and accessible by people with mental health problems”. Target 12: “By the year 2015, the adverse health effects from consumption of addictive substances such as tobacco, alcohol and psychoactive drugs should have been significantly reduced in all Member States”.

It was recommended that the system of the Health for All (HFA) indicators should balance the future oriented needs of the HFA targets and the current data availability. The sources of data should be preferably routine reporting systems of Member States, to ensure feasibility and minimise costs. A major issue is the use of common definitions for indicators used by more than one international agency. Work should be done to harmonise, as far as possible,
definitions and age groups with other international agencies and the relevant services of the European Commission using health indicators. The indicators should be valid, comparable and sensitive and, in addition, useful for the Member States themselves. According to the sources used by WHO suicide mortality data are available. However, comparability of other data such as data on attempted suicides between countries is very problematic. The problems concerning indicators of mental health are poor comparability and availability of data.

The Mental Health Division of the WHO-Euro in Copenhagen has further drawn up a list of five crude indicators that have been implemented in Eastern Europe and Caucasia. These are based on data on service use and on suicides committed. The list includes: number of psychiatric beds; mortality from suicide and self-inflicted injury; number of patients in mental hospitals; length of stay >365 days (for psychiatric patients); and new (serious) cases of mental disorders admitted to psychiatric hospitals.

OECD

The OECD secretariat has published health statistics since the mid-1980s. “OECD Health Data” is a comparative analysis of the description of key aspects of health care systems in 29 countries. The indicators comprise of hundreds of variables with definitions to enhance international comparability of data, details on the coverage and collection given by each country, and many diagrams including maps. The statistics cover currently data from 1960 to 1997. The indicators are grouped into ten classes (see appendix 4.) In the selection of the indicators attention has been paid to sufficient consistency, international comparability and significant availability. All three requirements are not satisfied for all the variables chosen as indicators.

Other organisations and projects

The European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) has devised an indicator for drug related deaths and collected data regarding year 1996. The indicator is based on causes of deaths extracted from two main sources, General Mortality Registers (GMR) and Special Registers (SR) (see Appendix 5.). The GMRs list underlying causes of deaths using the ICD-9 version. To derive the DRD figures defined E-codes (poisoning deaths) are extracted with combination of N-codes (nature of injury). The SRs are held by police and forensic institutions and include usually data on fatal overdoses and intoxications. It has appeared feasible to discern cases in which only opiates are registered as CODs, cases in which polysubstances without opiates are found, and psychoactive medicine cases without polysubstances.3

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3 EMCDDA: The DRD Standard, Final Draft Version, April 1999
The Euro-REVES project has outlined a measure of mental health expectancies by combining the age specific prevalence of the population in healthy and unhealthy states and age specific mortality information taken from a period life-table. The measure indicates the number of remaining years at a particular age that an individual can expect to live in a healthy state.

The Indicators of mental health

Monitoring mental health

For mental health monitoring, the essential questions are: 1) what are the needs in the general population, 2) how to address these needs, 3) are the needs being met in a satisfactory manner, and 4) what further actions are needed? Answers to these questions shed light on the scale of mental health problems, on which sub-populations have special mental health problems, on whether there are significant regional differences and on the reasons for the possible differences.

Many of the mental health indicators, measures of the determinants or mental health itself, considered important by the workgroup are not in common use in the Member States. These will need further development although the proposed instruments are known to be valid and reliable. The data acquisition for these indicators in need of development necessitates information based on surveys (See Annex VI).

The set of indicators comprises of a variety of variables from the simple and robust ones to the more sophisticated measures: basic indicators (routine data: e.g. indicators of service use and resources); standardised measures of distress and mental health (survey data); and intervening variables (survey data: social support and life events).

A summary of the proposed set of mental health indicators is presented in Table 3. The project has, additionally, listed the other factors relevant for mental health outlined in the ECHI list. These are presented list 2 also in the Annex II.

Table 3. List of the set of mental health indicators*

<table>
<thead>
<tr>
<th>Domain of the indicator (number refers to the ECHI subgroup)</th>
<th>Individual indicators (number refers to individual rank number of the indicator)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. HEALTH STATUS</td>
<td></td>
</tr>
<tr>
<td>2.1.3. Cause specific mortality</td>
<td>1. Suicide;</td>
</tr>
<tr>
<td></td>
<td>2. Harmful events, intention unclear;</td>
</tr>
<tr>
<td></td>
<td>3. Drug related deaths;</td>
</tr>
<tr>
<td></td>
<td>4. PYLL fraction: suicide</td>
</tr>
<tr>
<td>2.2. Morbidity, disease specific</td>
<td>5. Generalised anxiety disorder (incidence &amp; prevalence)</td>
</tr>
<tr>
<td></td>
<td>6. Major depression (incidence &amp; prevalence)</td>
</tr>
</tbody>
</table>
7. Alcohol dependency  
8. Suicide attempts (12-month prevalence);

| 2.3. Morbidity, generic | 9. Psychological distress;  
| | 10. Psychological well-being  
| | a) Energy, vitality (in SF-36);  
| | b) Andrews single item question (happiness)  
| | 11) Role limitations due to emotional problems |

### 3. DETERMINANTS OF HEALTH

#### 3.1.2. Personal conditions
12. Sense of mastery  
13. Optimism

#### 3.3.3. Social and cultural environment
14. Social support;  
15. Social isolation;  
16. Social networks;  
17. Life events;

### 4. HEALTH SYSTEMS

#### 4.1. Prevention, health protection and promotion
18. Suicide prevention projects;  
19. Projects to support parenting skills

#### 4.2. Health resources
20. Psychiatric beds;  
21. Psychiatrists;  
22. Child psychiatrists;  
23. Other professionals in the field of mental health

#### 4.3. Health care utilisation: psychiatric beds & outpatient care; social services
24. Number of inpatient episodes for mental health conditions  
25. Number of inpatient episodes for mental health conditions for minors;  
26. Number of long stay patients;  
27. Use of outpatient services;  
28. Self reported use of mental health services;  
29. Consumption of psychotropic drugs;  
30. Number of disability pensions due to mental disorders;  
31. Money spent on disability due to mental disorders;  
32. Sickness compensation periods due to mental disorder;

#### 4.4. Expenditure
33. Total national expenditure on psychiatric services;  
34. Proportionate national expenditure on psychiatric services;  
35. Proportionate national expenditure on psychiatric services for minors;

#### 4.5. Health care quality indicators
36. Availability of national quality accreditation

*For definitions see comprehensive list (Annex II)*

The implementation of the set of mental health indicators should further proceed in two stages, where stage 1. refers to data currently collected (useful already), and stage 2. to the most important mental health indicators
that still require development. Data for these indicators should be, in the future, collected annually or at least every third year. These phases are summarised in table 4. This table presents the phases on indicator group level (see Annex IV and V for availability)

Table 4. First stages of implementing the set of indicators

<table>
<thead>
<tr>
<th>Indicator domain</th>
<th>Stage 1. Available indicators</th>
<th>Stage 2. Indicators in need of development</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEALTH STATUS: Mortality;</td>
<td>HEALTH SYSTEMS: a) Health resources; b) Service use; c) Expenditure on services</td>
<td>HEALTH STATUS: a) Morbidity, Disease specific; b) Morbidity, generic; DETERMINANTS OF HEALTH: a) Personal factors; b) Social and cultural environment</td>
</tr>
<tr>
<td>HEALTH SYSTEMS: a) Health</td>
<td></td>
<td>HEALTH SYSTEMS: a) Self reported use of mental health services</td>
</tr>
<tr>
<td>resources;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Service use;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Expenditure on services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Source</td>
<td>Data collected annually in the MS, Eurostat, OECD</td>
<td>Survey instruments to incorporated into the ECHP or national surveys (consult HIS/HES)</td>
</tr>
<tr>
<td>Feasibility</td>
<td>May be readily included in the HIE MS*</td>
<td>Comparable data not yet collected: in the future annually or every third year</td>
</tr>
</tbody>
</table>

* As mentioned previously some indicators of resources are very robust.

Collection of existing data on the mental health indicators

The results of the collection of existing data and the pilot survey are presented in Annex VII. For only a few indicators data seemed to be readily available in The Member States and Norway. Most countries provided information on discharged patients who had been treated due to mental disorders. However, even here the definitions of discharge may differ. Some of the discharges are from specialised psychiatric hospitals some include also discharges from general hospitals. Some of the countries have provided the data on discharges concerning a two-year period. Problems of comparison thus remain. Furthermore differences in social security systems make the comparisons regarding disability pensions due to mental disorders cumbersome.

Some of the existing information on the indicators were derived from international organisations, mainly from the OECD. These indicators include suicide rate, PYLL due to suicide, and rate of psychiatric beds. Number of psychiatrists was provided by the UEMS and WPA. After the data collection some revisions (e.g. concerning the indicators of number of psychiatrists, of
discharges due to mental disorder adults and minors, use of outpatient services) were made as to the definitions of the indicators and some were altogether dropped from the list due to poor quality of data (e.g. total national expenditure on both psychiatric and child psychiatric services).

**Pilot implementation of the indicators based on survey data**

Implementation of the extension project involved the following tasks as stated in the Project Plan:

**Implementation in three phases:** 1) translation of the survey scales and defining data sources for routine statistical data; 2) collection of survey data through telephone interviews and retrieving data from other sources by questionnaire; and 3) analysis of results and comparison of the results internationally (reliability & validity).

Each participating country has been responsible for the translation of the survey instruments listed in the proposed set of mental health indicators. The pilot implementation survey has been conducted by telephone interviews in each country. The aim has been to collect ca. 400 successfully completed interviews in each participating country representing as much as possible the general population in the country. The samples collected are stratified (by sex, age and urbanicity) randomly collected of persons older than 17 years of age and younger than 75 years.

Each participating country has been, likewise, responsible for the data collection (both statistical and survey data) according to a common scheme and timetable designed by the project. The participating countries have reported the problems (non-response, drop-out, lack of data etc.) in the collection of the data. In respect to the feasibility and acceptability of the proposed set of indicators, the survey revealed no major problems. The set of proposed mental health indicators could be easily incorporated into other surveys, as the interview was not time consuming to carry out.

The results of the data collection and pilot survey are presented in Annex VII.

**Concluding remarks**

Although, the international organisations collect valuable information on individual indicators, the information important for mental health is not dealt with separately. There is also awareness of the fact that only some of the data collected are reliably comparable and available. Organisations like the OECD or WHO do not have the resources to complete the development of a set of mental health indicators. Therefore the quality aspect has been important in the development of the mental health indicators. However, only very robust indicators are available regarding service resources. Moreover, as
the systems themselves differ, an available, feasible and reliably comparable variable remains to be looked forward to. Indicators referring to the structure of the care system have been included in the indicator set, but not indicators concerned with the quality of care as emphasis has been on factors important for promotion of mental health and not the services.

It should be remembered that what is needed is a representation of mental health for pragmatic purposes. It is known from previous experience that there are serious difficulties to change the indicators already in use by the Member States, whether based on survey or routine data. A list of areas to cover and a review of the literature have informed, what kind of information is needed. The analyses of future mental health indicators and their established trends will provide content for future European mental health reports. Information on the significance of the data provided by the indicators is available in the comprehensive list.

It should not be forgotten that citizens are the basis for mental health indicators. The information should be made accessible for the public in the internet. A transparent system of comparable reliable core information can be created using the set of mental health indicators. There is, however, a need for further development. The use of the set of mental health indicators should be tested in a pilot to guarantee comparability of data and dissemination of the monitoring process.
**Appendix 1.**

Active Partners and National Contact Points:
*(Note: the Active Partners function as National Contact points for their own country)*
The members of the European Network on Mental Health Policy have served in most cases as National Contact Points in the EU Member States;

**Active Partners:**

Professor Ville Lehtinen, project leader  
Stakes, Helsinki  
Finland

Jyrki Korkeila, project coordinator  
Stakes, Turku  
Finland

Antony Morgan  
Health Education Authority, London,  
United Kingdom

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Netherlands Institute of Mental Health and Addiction, Trimbos-Institut  
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The Netherlands

Jose Sampaio Faria  
National School of Public Health  
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Viviane Kovess  
MGEN  
Paris  
France
National Contact Points:

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Pierre Campagna
Ministre de la Sante
Luxembourg

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Department of Health
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Université Libre de Bruxelles
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Norway

Viviane Kovess
MGEN
Paris
France

Michael Madianos
Monitoring and Evaluation of Mental Health Services Unit
Athens
Greece
Appendix 2. The time schedule

Month
0  Start of the Project
7 - 11 Analysis of the collected material
10  Workshop at the Finnish EU Presidency conference
11  Meeting with Active Partners and experts
12  The interim report
13 - 18 Agreeing on and defining the relevant indicators
13  Meeting with the Contact Points and relevant organisations
15  Meeting with Active Partners and experts
19 - 24 Finalising the final report
20  Meeting with the Contact Points and experts
23  Workshop with the Contact Points and Project Partners
24  Progress report;
25  Planning the implementation, finalising the survey instrument
26-27 Collecting existing data and translating the survey instrument
28-32 Collecting data and conducting the survey
32-33 Analysing the results
34  Drafting the final report
### Appendix 3: Data collected by the Eurostat

<table>
<thead>
<tr>
<th>National health surveys: selected topics</th>
<th>Chronic conditions, self-perceived health, long-term physical disability, activity limitations/temporary disability, height and weight, present smoking, former smoking, consumption of alcohol, physical activity, inpatient care, outpatient care, use of medicines; background variables: sex, age, educational level, economic activity.</th>
</tr>
</thead>
<tbody>
<tr>
<td>COD</td>
<td>Disaggregated by: sex, region (NUTS2), 5-year age groups, 65 causes of the European short list</td>
</tr>
<tr>
<td>Data on health care</td>
<td>Number of beds in hospitals, number of beds in psychiatric hospitals by NUTS2 regions, overall framework for health care is being prepared, manual of health accounts (together with OECD; rearrangement of data according to “functions” and “providers”, pilots carried out year 1999)</td>
</tr>
</tbody>
</table>
Appendix 4. Data collected by the OECD including variables relevant for mental health

<table>
<thead>
<tr>
<th>Domain</th>
<th>Sub-domain</th>
<th>Indicator useful for mental health</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Health status</td>
<td>Perceived health status</td>
<td>Perceived health status in three age groups for men, women and total</td>
</tr>
<tr>
<td></td>
<td>Mortality</td>
<td>Suicide</td>
</tr>
<tr>
<td></td>
<td>Potential years of life lost (PYLL)</td>
<td>Mental disorders</td>
</tr>
<tr>
<td>2. Health care resources</td>
<td>Hospital beds</td>
<td>Psychiatric care beds</td>
</tr>
<tr>
<td></td>
<td>Health employment</td>
<td></td>
</tr>
<tr>
<td>3. Health care utilisation</td>
<td>Average length of stay (LOS)</td>
<td>Average LOS by 49 diagnostic categories</td>
</tr>
<tr>
<td>4. Expenditure on health</td>
<td>Expenditure on inpatient care</td>
<td>Total expenditure on psychiatric care</td>
</tr>
<tr>
<td></td>
<td>Direct costs of illness</td>
<td>Public expenditure on psychiatric care</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mental disorders</td>
</tr>
<tr>
<td>5. Financing and remuneration</td>
<td>Not listed here</td>
<td>Not listed here</td>
</tr>
<tr>
<td>6. Social protection</td>
<td>Social expenditure</td>
<td>Disability cash benefits?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sickness benefits</td>
</tr>
<tr>
<td>7. Pharmaceutical market</td>
<td>Pharmaceutical consumption</td>
<td>DDD: Nervous system??</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DDD: Benzodiazepine derivatives</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DDD: Psychoanaleptics</td>
</tr>
<tr>
<td>8. Non-medical determinants of health</td>
<td>Alcohol consumption</td>
<td>Alcohol consumption</td>
</tr>
<tr>
<td></td>
<td>Tobacco consumption</td>
<td>Daily smokers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Heavy smokers</td>
</tr>
<tr>
<td>9. Demographic references</td>
<td>Not listed here</td>
<td>Not listed here</td>
</tr>
<tr>
<td>10. Economic references</td>
<td>Not listed here</td>
<td>Not listed here</td>
</tr>
</tbody>
</table>

4 (Demographic and socio-economic variables are not listed in the third column as they are not defined by the mental health project)
## Appendix 5. Drug related deaths (DRD) by EMCDDA

<table>
<thead>
<tr>
<th>Explanation</th>
<th>ICD-9 code</th>
<th>Explanation</th>
<th>ICD-10 code</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Poisonings”</td>
<td>E850-858</td>
<td>“Acute intoxication”</td>
<td>F10.0-F19.0</td>
</tr>
<tr>
<td>“Suicides and intentional self-harm, poisoning unclear intent”</td>
<td>E980.0-E980.5, 965</td>
<td>“Overdose”</td>
<td>X40-X49</td>
</tr>
<tr>
<td>“Dependence abuse, accidental poisoning”</td>
<td>304.0-305.9</td>
<td>“Undetermined event” (insufficient information)</td>
<td>Y10-Y19</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Provide specificity regarding substance</td>
<td>T36-T50</td>
</tr>
</tbody>
</table>