



# MHADIE

Measuring Health and Disability in Europe:  
supporting Policy Development

# MHADIE

## Policy Recommendations



[www.mhadie.it](http://www.mhadie.it)

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# the PROJECT

The European Commission's 6 FP Project MHADIE: Measuring Health and Disability in Europe: Supporting policy development is a multi-country coordination action and was led by Dr. Matilde Leonardi of the Neurological Institute "Carlo Besta" IRCCS Foundation of Milan, Italy. It brought together centres and experts from the Czech Republic, Germany, Ireland, Italy, Romania, Switzerland, Slovenia, Spain, Sweden as well as the World Health Organisation (WHO) and the European Federation of Neurological Associations (EFNA).

The research conducted in MHADIE has demonstrated the feasibility, utility and value of the ICF, as a classification and model of disability and functioning for the harmonisation of data across populations and sectors in Europe. The aim of MHADIE researchers has been from the beginning to further the goal of developing realistic, evidence-based and effective social policies for persons with disabilities that will achieve equality of opportunities and full participation. MHADIE results show the feasibility of a comprehensive description of disability, an evidence based definition of domains of functioning and disability, and the creation of a baseline reference population for comparisons, thereby increasing the EU capacity of analysis as requested by the EU disability Action Plan 2006-2007. In this way, inequalities can be described and measured by the difference between opportunities for participation that persons with and those without difficulties in functioning experience. These inequalities define unmet needs associated with difficulties in functioning, including those created by discriminatory policies and practices. Identification of disability inequalities is not merely an EU priority, it is also mandated by the UN Convention for the Rights of People with Disabilities to which nearly all EU countries are signatories.

By providing a common framework for defining and measuring disability, MHADIE's results help to improve the accuracy and comparability of estimates of prevalence of disability Europe-wide. The methodology used and the systems developed during the research period have begun the process of harmonising disparate disability and health data sets collected at national and international levels. Harmonisation is the first step to the much needed integration of existing statistical information systems across nations, sectors and life span.

In the area of disability policy, the "Scientific Support to Policies" Thematic Priority of EU seeks to provide a scientific underpinning for measuring disability, as well as the evidence base needed by European Union policymakers to take concerted and coordinated action in this important policy area. In its official communication on disability, in the "European Action Plan 2006-2007" (28/11/2005 – COM (2005) 604 final), the Commission proposed four priority actions for disability policy:

1. Encouraging activity;
2. Promoting access to quality support, care and health services;
3. Fostering accessibility of goods and services;
4. Increasing the EU capacity of analysis.

MHADIE project is one of the instruments selected by the Commission to reach the fourth priority action by 2007.

## MHADIE Project aims

MHADIE uses the International Classification of Functioning, Disability and Health (ICF) as its operational model and conceptual background.

The MHADIE aims were:

- a) to use the ICF model of disability to analyze and evaluate existing health and disability data sources;
- b) to demonstrate that the ICF model is adequate for describing and measuring patterns of disability;
- c) to show that ICF is useful and reliable for data collection and analysis in clinical, rehabilitation and educational sectors;
- d) to prepare policy recommendations and guidelines on health and disability for European Union.

It is well known that European countries define and measure disability differently and that this makes it impossible to have common policy guidelines for persons with disabilities. The MHADIE project was developed and conducted cross-culturally to fulfill the European Commission's mandate for MHADIE to provide scientifically appropriate tools to improve European health and disability data collection and analysis capacity.

# the PROJECT

## Methodology

The MHADIE Project covered three main research areas:

1. Statistical - designed to improve methodologies to analyze existing health and disability databases;
2. Clinical - designed to collect data on functioning and disability for clinical samples (1200 patients overall, representing 13 different diagnoses and 5 European countries);
3. Educational - designed to apply the ICF model in various educational contexts across Europe and, in light of the evidence, to develop the policy tool MAP-EP.

## Results

The ICF and the ICF adaptation for children and youth, the ICF-CY, (including the derived ICF Checklist and WHO-DAS II) were shown to be the appropriate basis for a common and multi-linguistic information platform for a variety of settings, samples and applications.

The MHADIE protocol made it possible to describe the impact of health and disability on people in their daily lives, in a manner that can be successfully linked to statistical and clinical data, and which provides more complete and accurate information than can be provided by diagnosis alone.

## Conclusions

The results of the MHADIE Project provide the background and justification for recommendations and guidelines that will help to design new European policy on health and disability.

These recommendations can be downloaded at [www.mhadie.it](http://www.mhadie.it) The final version is given to the EU Commission in October 2008.

An important aim of the MHADIE project was a workable and generic definition of disability, one which reflects the view of MHADIE researchers that disability is a universal, human condition, not the distinguishing mark of a separate, minority group. Disability is defined by MHADIE researchers as **“a difficulty in functioning at the body, person or societal levels, in one or more life domains, as experienced by an individual with a health condition in interaction with contextual factors”** (Leonardi M, Bickenbach J, Ustun TB, Kostanjsek N, Chatterji S, on behalf of the MHADIE consortium. The definition of disability: what is in a name? *Lancet* 2006;368:1219-1221).

The UN Convention on the Rights of Persons with Disabilities uses the ICF conception of disability and applies it to the common life experience of people with disabilities. The Convention requires all signatories to the treaty to recognize and enforce the full range of rights that secure inclusion and full participation of persons with disabilities.



# GENERAL Recommendations



## *Policy Recommendations on health and disability in Europe*

By addressing the difficult policy challenge of defining planning guidelines for health, social and educational policy in Europe, MHADIE researchers have taken the essential first steps in addressing the following policy questions:

1. How do we secure the mobility and comparability of health and disability data across EU countries?
2. How can useful and comparable clinical data on functioning and disability be collected by means of ICF (International Classification of Functioning, Disability and Health)?
3. How can we identify gaps in the data we need for health, disability and educational policy, and how can we fill those gaps?
4. How can the data that is collected remain consistent and comparable across policy areas and between EU member states?

In light of these priorities and obligations, and the key policy questions mentioned above, MHADIE researchers wish to make the following

## GENERAL POLICY Recommendations

1. **The underlying problem with the conceptualization of 'disability' found in EU disability policy is not the result of there being different definitions of disability, so much as the failure to create 'fit for purpose' definitions in accordance with the single, consistent and complete, underlying conception of disability provided by the ICF. We recommend that more work be done at the policy level to coordinate and integrate disability conceptualization at all policy levels.**
2. Given the trajectory of the underlying health condition and the fact that a person's environment will change throughout his/her life, living with a disability is a dynamic, ever-changing experience. Because of this a complete understanding of disability in Europe requires longitudinal studies from children to old-age. We strongly recommend that such studies be conducted.
3. Transportation policy is a key factor in participation rates of persons with disabilities, so this area of policy should be reviewed in light of the transportation requirements of persons with disabilities.
4. The family has been shown to be a substantial environmental facilitator in the lives of persons with disabilities, so disability policy should be reviewed to emphasize and support the role of the family.

# STATISTICAL Recommendations

MHADIE researchers also wish, in light of the results of their research, to make the following specific recommendations for statistical, clinical and educational policies.

MHADIE research started in 2005 and covered the last phases of UN debate for the production of UN Convention. Signatories of the UN Convention on the Rights of Persons with Disabilities **are required under Article 31 Statistics and Data Collection to "collect appropriate information... to enable them to formulate and implement policies to give effect to the Convention"**. Signatories are also obliged under Article 33 National Implementation and Monitoring, to "designate or establish at the national level an independent mechanism to promote, protect and monitor implementation of the present Convention". Both of these obligations require valid and reliable disability data.

The increasing importance of data standardization in Europe and worldwide is also shown by the fact that in 2008, the WHO and United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) have developed a Training Manual on Disability Statistics using the ICF as the framework. The manual can be downloaded from the following website:

<http://www.unescap.org/stat/disability/manual/index.asp>

1. **Reliable and valid measurement of disability can only be achieved by surveys that elicit data about functioning levels in multiple life areas, rather than by means of a small set of impairment questions that produce unreliable and invalid disability prevalence estimates that distort policy planning and measurement of the change in functioning produced by interventions. The results of MHADIE research supports the recommendation that national surveys use a multi-dimensional approach that covers all aspects of the disability experience.**

Data on the prevalence of disability from existing surveys and censuses are implausible. For example, there is more than a three-fold difference in the prevalence of disability between Romania and the Czech Republic (6% and 20%) in reported data. Indeed, recently compiled data by the World Bank puts the Romania figure at 58% from a 2000 survey. In contrast, the years of life lost due to disability per person in these two countries, as estimated by WHO, is about 8 and 7 years respectively, which suggests that levels of disability in these two countries could not be that different. MHADIE's analysis of the data from the World Health Survey indicates that, depending on the threshold set to dichotomise the population, this difference more plausibly ranges between 10-15% across the MHADIE countries. MHADIE results suggest that the reason why existing national surveys produces these implausible and inconsistent results is that they tend to rely on single-dimension impairment questions (Are you blind? Do you have a chronic illness?). The World Health Survey, by contrast, embodies the lesson of the ICF model that disability is a multi-domain phenomena that is not directly linked to specific impairments of diagnoses.

# STATISTICAL Recommendations

- MHADIE researchers recommend that disability and health surveys should be combined or merged to measure the impact of environmental factors on health and disability outcomes with the aim of determining how much of the decrement in performance of a person is due to environmental factors and how much to the intrinsic health state.

MHADIE results suggest that functioning is most accurately measured for policy purposes in the general population as a continuous distribution rather than in dichotomous categories (healthy/ill; normal/disabled). Combining this data with the evaluation and measurement of barriers and facilitators in the environment, makes it possible to separate out the effect of the environment on levels of disabilities in order to reveal the underlying decrement in functioning caused by the health condition itself. Only in this way can strategies be identified to enhance functioning – changes to the individual health condition or changes to the environment. By contrast, if individuals are dichotomously identified as either disabled or not, any measurement of the impact of environmental factors of only those characterised as disabled cannot be disentangled from the impact of their health condition.

- Valid measurement of disability, and the magnitude of the problem at the population level, cannot be adequately achieved by means of surveys that rely on *a priori* diagnostic categories. MHADIE researchers therefore recommend that measurement of disability be based both on data about capacity and performance levels, independent of underlying health condition or disease aetiology.

We now know from burden of diseases studies (from World Bank and WHO) that it is possible to identify and rank the disabling impact of underlying health conditions, independent of environmental factors. For example we know that depression is as disabling as chronic physical conditions such as arthritis, asthma, angina and diabetes, and indeed may be as disabling as paraplegia in some individuals.

What is predictive of disability is, in short, functional capacity not the underlying health condition or indeed *a priori* chosen sensory, mobility or intellectual impairments (the standard choice for traditional disability data collection strategies). The strategy of measuring a set of impairments or a set of health conditions will inevitably overlook major environmental determinants of disability. Traditional disability data collection strategies typically ask if a person has a sensory, mobility or intellectual impairment and exclude conditions that are likely to be equally disabling. The analysis of the clinical data from the MHADIE study suggests that in clinical populations, there is a systematic relationship between the *capacities* (what a person does without interacting with any environmental factors) of an individual and their *performance* (what a person does interacting with environmental factors) in their real life environments. Often *performance* is worse than *capacity*, since there are considerable environmental barriers that are experienced. The identification of the gap between capacity and performance in population surveys will help design interventions that are targeted either at individual capacity or at environmental factors in order to optimise performance. Furthermore, using only categories of impairment fail to capture actual individual needs and such strategies run the risk of excluding people who may be in most need.

# STATISTICAL Recommendations

4. Ageing is the most important factor associated with declines in functioning and is the driving force for projections of magnitude of disability as confirmed by the MHADIE data analysis. MHADIE researchers therefore recommend that future surveys should take more detailed measures to capture ageing phenomena.

Declining fertility and longer life expectancy across Europe have already begun to increase the proportion of older individuals in the population. Projections from the UN Population Division suggest that this trend will continue for the next 25 years. Data analysed for the MHADIE project show that older adults have worse functioning in all countries. In addition, WHO's work on the projections for the global burden of disease suggest that these demographic trends will drive the increase in chronic diseases over the next 25 years. Together, this work indicates that ageing will be the major contribution to future increases in the overall burden of illness.

5. The research performed by MHADIE has demonstrated the feasibility, utility and value of ICF classification and its Biopsychosocial model in harmonising data across populations and sectors in Europe. The ICF survey mapping **software© developed for the research project supports the recommendation** that disability surveys should aim to capture performance levels, while health surveys should capture capacity levels. Together, these data provide a complete portrait of disability.

Although it is typically assumed that questions using similar concepts in different surveys can be used to evaluate or assess the same phenomena, in fact the correspondence between concepts and questions is not always clear. The **MHADIE ICF survey mapping software©** has made it possible for researchers to clearly express the semantic components of survey questions in order to understand the underlying dimensions of questions used in different surveys. To clearly determine the content of different surveys, and to account for how the operational definitions of different concepts have been developed, it is important to compare semantic components and ground them to the ICF. Once that is done, the underlying structure of disability becomes apparent. In particular, data concerning the levels of performance of an individual in his/her environment **must be linked to data concerning the levels of an individual's capacity in order to determine the role of environmental factors in performance levels.** The **MHADIE ICF survey mapping software©** can coordinate these important data components.

# CLINICAL Recommendations

1. Diagnoses alone are not sufficient in clinical settings to guide care and management. MHADIE researchers recommend that the ICF model and its related instruments be used as complementary tools for (a) defining person's functioning (b) identifying patient's needs and planning interventions, and (c) evaluating clinical outcomes.

MHADIE clinical data have been collected across 13 different diagnostic groups in five EU countries, and across clinical hospitals, outpatients, and rehabilitation settings. Looking at the differential utilisation of ICF categories between MHADIE samples, the magnitude of impairments, limitations, restrictions and environmental factors varies, not only across health conditions, but also within each group. For example, in patients with depression, musculoskeletal conditions, the average number of impairments in body functions is similar, but the range of detected impairments is almost the double within patients with musculoskeletal conditions. It is difficult to capture the full range of problems persons experience by relying on disease-specific measurements only. Impairments should be considered not only as symptoms, but as a component of an overall functional profile, and should be connected to limitations in performing activities. Such a profile, based on ICF categories, would provide a more accurate and individualised description of the health conditions, which in turn would greatly improve patient care. Combining functional information with diagnostic ones in evaluating needs, planning interventions and monitoring clinical outcomes will further improve care and management.

2. **Since MHADIE data have shown that the ICF notions of the patient's capacity and performance play a crucial role in explaining the impact of a health condition on the person's life, in a reliable and valid manner,** MHADIE researchers recommend that ICF-based clinical instruments be developed for routine clinical use in order to assess both capacity and performance.

In the ICF, *capacity* represents a person's level of functioning, exclusive of the effect of the environment, while *performance* represents the full interaction between capacity and environmental factors. Since people do experience environmental barriers and facilitators in their lives, it is crucial that clinical tools take these factors into account when assessing individual performance levels. **MHADIE data show, for all health conditions and in all clinical settings, the level of persons' performance tends to be lower than the level of their capacity (mean of 7.9 for performance, 10.3 for capacity).**

The internal distribution within health conditions varies as well: for example, persons with conditions in which cognitive or mental impairments are common (e.g. depression and traumatic brain injury) report higher limitations in *D1-Learning and applying knowledge* and in *D3-Communication*, while those with movement difficulties (e.g. Parkinson disease and stroke) report more difficulties in *D4-Mobility* and in *D5-Self care*. **This means that the level of a person's functioning should be assessed in a manner that captures the differential impact of different diseases, settings and other relevant variables (e.g. nationality, gender, and kind of treatment).** In short, as we recommend, clinical instruments for assessing both capacity and performance need to be developed.

# CLINICAL Recommendations

3. MHADIE research shows that environmental factors have an influence on **patient's performance** independent of their *capacity*, MHADIE researchers therefore recommend that these factors be taken into account when assessing and planning clinical as well as social interventions.

In the logic of the ICF framework, the difference between levels of *capacity* and *performance* is explained by the effect of environmental factors. The relationship between environment and functional profiles is more complex than a linear statistical association, but the pattern of this association is predictable: as facilitators increase, and have a greater impact than barriers, the severity of the limitations and restrictions in ICF Activity and Participation domains decreases. The correlation between limitation in capacity and restriction in performance and environmental factors does not appear very high: correlations greatly vary across pathologies in close relationship to the difference between capacity and performance scores. **This means that environmental factors, far from being irrelevant to explain treatment outcomes, are essential to them and should be taken into account when assessing and planning all interventions, both medical and social.** Currently, MHADIE consortium has identified the almost total lack of standardized instruments that take environmental factors into account.

4. MHADIE researchers recommend that the impact of disability must be **assessed, not merely at the clinical level, but also at the level of the person's social and economic participation** – in the assessment of, for example, performance at work or in other life contexts as MHADIE project proves that information about interpersonal interactions, major life areas and community and social life, can be successfully collected and evaluated.

A functional profile of an individual consists of four elements: impairments, performance levels, capacity levels and environmental factors that act either as facilitators or as barriers to performance. For clinical information about all life areas – education, work, social relationships and social and community life – these four elements are potentially important outcome indicators since they reflect the complete functional profile of a person in his or her actual context. The MHADIE project demonstrates that information about interpersonal interactions, major life areas and community and social life, can be successfully collected and evaluated by different professionals, once training on the use of the ICF is provided.

# CLINICAL Recommendations

5. MHADIE researchers recommend that, in the clinical setting, the ICF model be used as a common language across levels of care and for different intervention purposes (prevention, treatment, rehabilitation, public health); ICF is useful as a common language across professions and for collecting information for multidisciplinary treatment.

In MHADIE project data were successfully collected across different settings, and for planning interventions, in a manner that highlights both the person's weaknesses and strengths. This kind of data collection can also be used for population studies to identify, for example, the extent to which people living in particular geographic areas can benefit from health or social interventions. MHADIE data have been collected by different professionals - medical doctors, psychologists, nurses and physiotherapists, social workers - as well as from documents. Once data have been organized and different assessments have been matched to the ICF checklist, the resulting information reflected the clinical judgment of professionals (with their specific expertise) on the one hand, and the person's judgment (regarding the presence and extent of barriers and facilitators) on the other hand. These combined perspectives offer a complete picture of the experience of disability.

Our research emphasizes the need for consistent training so that the methodology to use ICF and its tools, together with the other specific and common instruments, is the same for each setting and for each health condition.

6. We recommend the use of the ICF for understanding the scope and nature of the impact of a health condition on the life of a person in domains such as education or work.

As the MHADIE research was conducted it was observed that difficulties in education or work can be explained by whether a person with impairments confronts barriers in the educational or work environments. The extent of participation (which in the ICF framework is understood as the actual level of a person's performance given the actual environment) is a far more sensitive and informative indicator of the importance and need for social intervention than information about health conditions. Moreover, since ICF-based assessment can quantify the difference in participation levels for people with different impairments, it is possible to focus in on the environmental barriers that are responsible for non-optimal participation rates. MHADIE results clearly show that ICF-based functional profile might be used by clinicians in the design of biopsychosocial interventions – such as difficulties that patients experience in participating in various social domains – and in identifying environmental factors that may act as barriers or facilitators to the patient's recovery, well-being and inclusion in society.

# EDUCATION Recommendations

1. **MHADIE researchers recommend the ICF framework as a useful structure for collecting data relevant to developing eligibility criteria for educational services for children and youth.**

Eligibility criteria defined by education systems regulate the access to additional or specialized resources not readily made available to all students. Eligibility is established by identifying the gap between present functioning and potential future functioning – rather than in terms of an undesired outcome (decrement in functioning or lack of progress) to be expected if additional services are not provided. Although eligibility decisions are obviously based on functioning, most countries link eligibility to disease or impairment, that are one-dimensional categories. As MHADIE research shows it is clear that this situation results in an insurmountable conceptual gap between deficit-oriented information describing disability and competency-oriented information describing desired functioning, operationalised by educational goals. Additionally, despite the widely known fact that environmental factors, such as the quality of instruction/education can cause or aggravate functional problems, such factors are not systematically taken into account by traditional eligibility criteria, but we have demonstrated that they should be taken into account.

2. **Across the education sector, we recommend that the consistent and valid understanding of disability provided by the ICF be used to understand the embeddedness of disability categories and the process by which disability categories of special needs are created and applied.**

In the educational systems of most European countries disability categories may be used as a clinical description of a student. But they may also merely describe a student's response to an intervention, or simply be an indication that a specialized resource of educational setting has been provided to the student.

In most countries, disability categories are not clearly defined or consistently used. They may be used to inform policy decisions, to organize administrative processes, to regulate access of professionals to jobs, or merely to justify educational programmes. They may represent very different correlates of participation problems depending on the context in which they are applied. This inconsistent use of disability categories leads to circular thinking: children with learning problems need to attend a program for the learning disabled, hence, they must have a learning disability. MHADIE research shows that ICF provides the terminology and overall conceptual model that makes it possible to disaggregate disability categories and analyze their specific applications in a given education system.

3. **MHADIE has shown that MAP-EP<sup>©</sup> (Matrix for Analysis of Problems in Educational Planning), developed by MHADIE researchers, is a useful and valid protocol for linking clinical, administrative and survey data to components in the education sector, and we recommend to use it as a guide to identify the information that needs to be collected for educational planning.**

Given that disability categories tend to be used inconsistently (sometimes to represent groups of children with similar clinical characteristics, sometimes groups affected by the same policies, and sometimes groups in the same educational programs), in order to achieve consistent use, it is important to be able to analyze and compare underlying problems. For this purpose, MHADIE researchers developed an information matrix called MAP-EP<sup>©</sup> for comparing the use of disability categories and related information at different levels of the education systems and at different points of the educational planning process. For example, a special teacher needs different information to develop an individual educational plan than is required to establish eligibility for programmes or to monitor the overall outcome of all students at the end of compulsory education. The MAP-EP provides a protocol for analyzing and contextualizing available information and links the appropriate information for each application. MAP-EP can be further tested for usefulness and consistent application across the educational system.

# EDUCATION Recommendations

4. **MHADIE research highlights the importance of including the 0-6 years children sub-groups in population surveys for prevention policies. Given this, MHADIE researchers recommend that the ICF-CY (ICF Children and Youth version) be used to collect these data.**

MHADIE researchers tested ICF-CY in a population of children, 0-3 years with special needs. ICF-CY proved to be very useful in capturing issues of participation of children as well as their environment. Some issues were rehabilitative, other were preventive. Data is often missed in statistical studies for this age range, but is urgently needed for preventive actions for the very young. Linking early development data to health and health-related measures in older adult life will dramatically increase the value of self-reported measures of these parameters. ICF-CY is the best way to collect functional information together with health information to create longitudinal data sets, useful to tailor interventions at the different stages of life.

5. **We recommend that new instruments and tools, that more reliably capture the child's participation and complexities of educational participation in school, be developed.**

Extent of current participation in education is a predictor for future participation, not only in subsequent educational levels, but also for future participation in employment, economic and social life. MHADIE research shows that participation in education is multifaceted and requires more attention than it is usually given. There are known critical factors that lead to restrictions in participation, some quite unrelated to a health condition, namely personal factors such as socioeconomic background or gender. Participation in education may be experienced differently because of the child's relationship to the teacher, to other students, or the class, or because of negative attitudes associated with 'special schools' rather than 'regular schools'. Few of these factors can be successfully identified or measured by the instruments currently available, as these are often limited to specific groups of children or to specific aspects of participation, such as the expression of an interest to participate. Given the availability of ICF-CY that could provide the biopsychosocial framework new instruments and tools, that adequately account for the complexities of educational participation, are therefore required.

6. **MHADIE researchers recommend that the social impact, resulting from outcome evaluation of education policies, be collected along with education's outcome indicators for children with disabilities.**

European Ministries of Education are adopting competence-based systems of accountability. From a focus on input indicators, policy makers are becoming interested in academic and non-academic outcomes. Despite this shift from input to outcome indicators, many countries lag behind in the application of outcome indicators for children with disabilities. The social recognition of the need to equalized rights for persons with disabilities, coupled with the trend toward life-long learning, educational systems are increasingly required to show how well they do with their students with disabilities. MHADIE research shows that appropriate outcome indicators for these students will be developed only when data on students' performance, as well as other functional characteristics will be linked to the additional resources or services they received. Such information needs to be consistently collected across the levels of education and compared within and between European countries.

# Glossary

**ICF (International Classification of Functioning, Disability and Health, WHO, 2001):** The ICF is WHO's framework for measuring health and disability at both individual and population levels. The ICF was officially endorsed by 191 WHO Member States in the Fifty-fourth World Health Assembly on 22 May 2001 (resolution WHA 54.21).

**ICF-CY (International Classification of Functioning, Disability and Health for Children and Youth) (WHO, 2007):** is derived from the International Classification of Functioning, Disability and Health (ICF). It includes further detailed information on the application of the ICF when documenting the characteristics of children and youth below the age of 18 years.

**Functioning:** umbrella term that indicates nonproblematic (i.e. neutral) aspects of health and health-related states.

**Disability:** difficulty in functioning at the body, person or societal levels, in one or more life domains, as experienced by an individual with a health condition in interaction with contextual factors. (Leonardi M, Bickenbach J, Ustun TB, Kostanjsek N, Chatterji S, on behalf of the MHADIE consortium. The definition of disability: what is in a name? Lancet 2006;368:1219-1221).

**Body functions:** the physiological functions of body systems (including psychological functions)

**Body structures:** anatomical parts of the body such as organs, limbs and their components.

**Activity and Participation:** the complete range of domains denoting aspects of functioning from both an individual and a societal perspective.

**Environmental Factors:** factors that make up the physical, social and attitudinal environment in which people live and conduct their lives.

**Performance:** qualifier that describes what an individual does in his or her current environment.

**Capacity:** qualifier that describes an individual's ability to execute a task or an action; capacity reflects the full ability of the individual neutralizing the impact of different environments on the ability of the individual.

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## Measuring Health and Disability in Europe: Supporting Policy Development

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supporting Policy Development**



## **HIGH LEVEL CONFERENCE**

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