ECHI-2; proposed list of EC health indicators; version 08 draft of 16 February 2004

ECHI-2-33

This list is the further evolution of the ECHI comprehensive indicator list from the ECHI-1 final report of February 2001.

In the **12 March 2003** version (discussed in the March 18-20 meeting of HMP and ECHI) the following things were changed:

- Lay-out adapted in fewer columns.
- Some minor rearrangements in the hierarchy.
- Additions made from the following projects: Musculoskeletal conditions (MSC), diabetes (Eudip, only core indicators), cardiovascular diseases (Eurociss, interim), health promotion indicators (EUHPID; interim), environmental health risks (EHRM, only primary set), cancer (Eurochip, interim, only core set), child health (CHILD), health status indicators (Euro-reves), perinatal health (peristat, interim, only core set), human resources, mental health. In addition, some recommendations from the injury programme (IPP) and from the OECD health care quality project were included.
- Justification of the selection of indicators is made in the headings, in more general terms; justification of selection of individual indicators is normally given in the respective project reports.

In May 2003, an abridged version was issued, especially for the selection of the 'first phase core list' (shortlist). This version took account of many comments of the March 2003 meeting.

In the **present 16 February 2004** version (for discussion in the February 19-20 meeting of ECHI and others) the following things were adapted from the March 2003 version:

- Uptake of many comments of the March 2003 meeting;
- Rearrangements within the 4 columns:
 - (1) Generic indicator or item.
 - (2) Operational definition; indicator definition of WHO-HFA, OECD, Eurostat, which in most cases is intended to be followed (implemented now for WHO only; sometimes discrepancies appear between different recommendations); stratification by gender, age, region or SES.
 - (3) An indication of the source type and data availability, often from the HMP project involved.

- (4) The HMP project or other source from which the recommendations came, with additional remarks. The rearrangements have not been finalised completely in the present version.
- Additions from several HMP projects:
 - the 'secondary' indicators from Eudip (diabetes), Eurociss (cardiovascular), EHRM (risk factors), Eurochip (cancer), Peristat (perinatal health);
 - indicators from Reprostat (reproductive health), and from the two more recent nutrition projects Public Health Nutrition and Dafne;
- Inclusion of the indicator in a user-window is mentioned in the first column (UW-xx, according to the document 'Proposing user windows with ECHI'; by now only implemented for six user windows).

By the time of circulating this version (February 16, 2004), I did not succeed in including and editing all the changes and rearrangements mentioned above. I hope that nevertheless things are sufficiently clear to have fruitful discussions at the meeting. I very much welcome all comments from the co-ordinators of projects and working parties since it is their work that will make the list operational. – Pieter Kramers.

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
These inc	Class 1. Demography and So icators give a general picture of the situation in a co		lth-relevant issues.
calculation of standardised rate	the denominator for calculation of many other indica s (i.e. corrected for differences in population structu		gender, age or region, and the
1.1.1 Population status			
Total population	Total population		
 Population composition by age; UW-0, UW-14 	 Median age of population % population under 15 % population 65 and over 		PHnut: population 71+
 Population by region 			 Define region level; Isare project give health-policy-related regions; Eurosta uses (sometimes different) Nuts level
 Population by urbanisation level 			Select definition
1.1.2 Population dynamics			
Birth rates; UW-0	 No of live births Crude birth rate 		•
 Total fertility rate; UW-0, UW- 11 	Total no of children a woman would have if she experienced the current age-specific fertility rates throughout her childbearing life; WHO-HFA	Population statistics	Reprostat project
 Mother's age distribution; UW-11, UW-9 	 WHO-HFA: % of live births to mothers <20 and >35 Peristat: by 5-year age bands, 10 up to 45+ 	Civil and medical birth registers	Peristat project
 % Teenage mothers; UW-0, UW-11 	Reprostat: births in women <20 per 1000 women of the same age	Birth registers, census	Reprostat project:
 Maternal age at 1st birth; UW- 11 	Mean and median age of women at first delivery	Birth registers, vital statistics, Council of Europe	Reprostat project

In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
 Distribution of parity; UW-9 	Number of previous live/still births of women delivering a live or stillbirth	•	 Peristat project: note varied registration of previous stillbirths or multiples
 Induced abortions; UW-11 	 Reprostat: No and rates of induced abortions per 1000 live births; also: induced abortion per 1000 women 15-49 of age WHO-HFA: no of induced abortions per 1000 live births; total, <20, >35 age mother 		Reprostat project
Death rates; UW-0	 Total deaths Crude death rate 		
Migration	Net migration		Immigration and emigration separately
 Annual population change 	• in %		Define: over 2, 5 or 10 years
Population projections; UW-0		Cooperation to harmonise methods	 Change over e.g. 20, 40 years, for: total, % under 15, % over 65. Eurochip: age distribution in future
1.0 Capia accuración factores the	indianteur included here very sent new detient hereiteur		
health; they can be used for st this area available by Eurostat p.m.:: (taken from 2.3.9) SES pi inequality to measured as such, no issues.	roject: Rate ratios and absolute rate differences; preferab t with reference to any gradient. ECHI subgroup: no need	tus (education, occupational class, ir ly by extreme groups for education a l for separate inequality indicator; tac	ncome); more extended data and indicators in and income (occupational class). WHO/HQ: skle the point by proper stratification of other
health; they can be used for st this area available by Eurostat p.m.:: (taken from 2.3.9) SES pi inequality to measured as such, no issues.	ratifying other indicators according to socio-economic star roject: Rate ratios and absolute rate differences; preferab	tus (education, occupational class, ir ly by extreme groups for education a l for separate inequality indicator; tac	ncome); more extended data and indicators in and income (occupational class). WHO/HQ: skle the point by proper stratification of other
health; they can be used for st this area available by Eurostat p.m.:: (taken from 2.3.9) SES pi inequality to measured as such, no issues.	ratifying other indicators according to socio-economic stat roject: Rate ratios and absolute rate differences; preferab t with reference to any gradient. ECHI subgroup: no need	tus (education, occupational class, ir ly by extreme groups for education a l for separate inequality indicator; tac	ncome); more extended data and indicators in and income (occupational class). WHO/HQ: skle the point by proper stratification of other
 health; they can be used for st this area available by Eurostat p.m.:: (taken from 2.3.9) SES prinequality to measured as such, no issues. 1.2.1 Population by household s Population by household situation 	 ratifying other indicators according to socio-economic state roject: Rate ratios and absolute rate differences; preferab t with reference to any gradient. ECHI subgroup: no need situation; justification for selection: household situation is a % of households (or persons?) in each of 5 classes: 1-person, lone parent, couples with/without children, other. Eurostat indicator; by 	tus (education, occupational class, ir ly by extreme groups for education a l for separate inequality indicator; tac an important socio-economic determ	ncome); more extended data and indicators in and income (occupational class). WHO/HQ: skle the point by proper stratification of other inant of health, and well measurable
 health; they can be used for st this area available by Eurostat p.m.:: (taken from 2.3.9) SES prinequality to measured as such, no issues. 1.2.1 Population by household s Population by household situation Children with single-parent 	 ratifying other indicators according to socio-economic state roject: Rate ratios and absolute rate differences; preferabt with reference to any gradient. ECHI subgroup: no need situation; justification for selection: household situation is a % of households (or persons?) in each of 5 classes: 1-person, lone parent, couples with/without children, other. Eurostat indicator; by gender, age, region 	tus (education, occupational class, ir ly by extreme groups for education a l for separate inequality indicator; tac an important socio-economic determ • Registry; survey • Census; household survey	income); more extended data and indicators in and income (occupational class). WHO/HQ: skle the point by proper stratification of other inant of health, and well measurable Child project; gender, 5y age groups <17

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
citizenship	'nationality'?	data	
 Mothers by country of origin; UW-9 	•	•	Peristat project: for development
Children seeking asylum	% of children seeking asylum, alone or as part of a family, per 1000 resident children	•	Child project; gender, 5y age groups <17
1.2.3 Education; justification for	selection: education level is one of the most clear-cut ele	ments of SES as a determinant of h	nealth, and well measurable
Population by education attainment; UW-0, UW-14	• No, % in 4 classes: elementary, lower secondary, upper secondary, tertiary (ISCED); by gender, age, region;	Registry; survey	 SES project; classes to be used when stratifying other data to SES; PHnut project
 % of 18-24-y old not in education and with low qualifications 	Eurostat key indicator	•	•
 Education environment of children 	% children with 'current mother' in each of the 4 ISCED classes	 Population census; household survey 	Child project; gender, 5y age groups <17
• Education of mothers; UW-9	% of women delivering babies in each of the 4 ISCED classes	Birth registers, perinatal surveys	Peristat project
Education enrolment	No, %, 4 ISCED classes		
Literacy rate			
Early school leavers			Child project
Pre-primary education age 3- 5			Child project
1.2.4 Employment; justification t	or selection: employment type is one of the important ele	ments of SES as a determinant of h	ealth, and well measurable
Population by employment type	ISCO classes 2-digit; useful in health context?		
 Population by occupational class; UW-0, UW-14 	 No, %, current or last occupation; 6 ISCO groups: upper non-manual, lower non-manual, skilled manual, unskilled manual, self employed, farmer. by gender, age, region 	Registry; survey	 SES project; classes to be used when stratifying other data to SES; PHnut project
Children by household occupational class	 In children: % of children living in households of each of 6 ISCO classes (highest of father/mother), by gender, 5y age groups <17 	Population census; household/labour force survey	Child project
Total labour force			

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
• Total employment; UW-0	Employment rate, 15-64, by gender, age groups, region	Eurostat: LFS	•
 Total unemployment; UW-0, UW-14 	 % of population not in labour force; Eurostat: unemplyed proportion in active population; longterm: >12 mnts (for 15-24: > 6 mnts), by gender, age groups, region. 	Eurostat: Labout force survey (LFS)	PHnut project
1.2.5 Income distribution; justifi	cation for selection: income level is one of the important e	lements of SES as a determinant of h	ealth, and well measurable
Population below poverty line; UW-0, UW-14	• Eurostat: % of population with income below 60% of national median (equivalised; 'poverty line')		PHnut project
Children below poverty line	% of children living in households with income below 60% of national median, in at least two of the previous three years	Household surveys	Child project; gender, 5y age groups <17
Income distribution	80/20 share ration of total income by quintile	•	
1.2.6 General economics			
• GDP	•		
GDP PPP	•		
This section contains various 2.1 Mortality, general	Class 2. Health aspects of the health situation of the population. It includes both general and dise	ncludes mortality as well as morbi	dity with its functional consequences. It
2.1.1 Life expectancy & related			
Life expectancy; UW-0	• WHO-HFA: At birth, ages 1, 15, 45, 65, by gender and total; Wiesler's method;	Mortality data	calculations done by WHO and Eurostat give different results; resolve! Eurochip: present lifetables
Chance of dying in age	 0-5-15-45-65-75-+, by gender WHO: 0-5, per 1000 live births, by gender 	Mortality data	•

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
2.1.2 Death rates; mortality rate	s are basic indicators for health; even more so are age-sp	pecific mortality rates, especially of yo	ounger age groups
Crude death rates	Crude rate per 100.000 population	Mortality data; by gender and 5-year age band	SES project: Advised for SES comparisons;
Crude death rates by age	 Crude rate age 0-5 per 1000 live births Crude rate age 0-20 per 100.000 pop. By gender, SES 	 Mortality data; by gender and 5-year age band 	Child project: 0-5 years and 0-20 years old, by gender and SES
Standardised death rate; UW-3	• Standardised rate; 0-64, 65+, by gender, region	 Mortality data; by gender and 5-year age band 	Use European standard population
 Infant mortality; UW-0, UW-9 	 WHO-HFA: Deaths under 1 year per 1000 live births; by gender, SES; Peristat: same, plus: 'after at least 22 weeks gestation'; by gestational age, birth weight and plurality 	Mortality data; civil/medical registers	Child project; Peristat project
Neonatal mortality; UW-9	 WHO-HFA: no. of deaths under 28 days per 1000 live births; subdivide by early (0-6 days), and late (7-27 days). Normally include births over 500 g birthweight Peristat: by gestational age, birth weight and plurality 	 Mortality data; civil/medical registers 	 Peristat project Source?: only births of at least 22 week gestation
Postneonatal mortality	WHO-HFA: Deaths 28 days – 1 year per 1000 live births	Mortality data; civil/medical registers	•
 Perinatal mortality; UW-0, UW-9 	 WHO-HFA: fetal deaths (over 1000 g) plus early neonatal deaths per 1000 live + stillbirths. Proxies for weight limit acceptable 	 Mortality data; civil/medical registers 	Peristat project:
Causes of perinatal mortality; UW-9	•	•	Peristat project: development
Fetal mortality; UW-9	• Fetal mortality rate; no. of fetal deaths at/after 22 weeks/1000 live + stillbirths in a given year; by gestational age, birth weight and plurality	Mortality data; civil/medical registers	Peristat project: sensitive to underreporting at low gest. Ages
Inequality in deaths	Rate ratios and absolute rate differences		SES project: preferably by extreme groups for educational or occupational class

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
 This shortlist was also selected for beyond the 65 Eurostat shortlist, as For all causes of death the following No. of deaths Crude death rates; SES projec Standardised death rates (SDF Cause-specific PYLL's; numbe 	t: by SES for large COD groups R); European standard population; 0-64, 65+, by gender, r: calculate by remaining life expectancy in Member State licator for premature death. Eurochip: calculate by differe	r usability across ICD versions. In a a single ICD chapter. These are ma region (UW-0) e or by difference with top life expec	ddition, some specific causes are selected arked with (*). All causes are by ICD-10. tancy in EU (m 78, w 83); normative choice!
 2.2.1 Infectious/parasitic; ICD A00- All causes Tuberculosis, A15-A19, B90 Meningitis, A39 AIDS, B20-B24 Viral hepatitis, B15-B19 	 See heading 2.2 WHO-HFA: SDR all causes, tuberculosis (A15-A19, B90), diarrhoeal diseases in children under 5 (A00-A09), malaria (B50-B54) by gender and 5-year age band 	Mortality data;	Child project: by ages 1, 1-4, 5-9, 10-14, 15-17 age and SES.
 2.2.2 Neoplasms; ICD C00-D48 all neoplasms; lip, oral, pharynx, C00-C14 oesophagus, C15 stomach, C16 colon, C18 ano-rectal, C19-C21 liver & intrahepatic bile ducts, C22 pancreas, C25 larynx/trachea/bronchus/lung, C32-C34 melanoma, C43 breast, C50 	 See heading 2.2 WHO-HFA: SDR all causes (C00-C97), trachea/bronchus/lung (C33-C34), cervix (C53), breast (C50) by gender and 5-year age band 	 Mortality data Cancer: Eurocim cancer registries 	Most causes in Eurostat 65; causes marked (*) added by Eurochip/Eucan projects as part of 23 standard causes, an by CHILD project. Child project: by ages 1, 1-4, 5-9, 10-14, 15-17 age and SES.

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
cervix, C53			
 other uterus, C54-C55 			
• ovary, C56			
 prostate, C61 			
 kidney, C64 			
• bladder, C67			
Iymph.haematopoeitic tissue, C81-96			
 head/neck* 			
 kaposi* 			
 mesothelioma* 			
 all childhood cancers* 			
 gall bladder* 			
testis*			
 brain/CNS* 			
 thyroid* 			
2.2.3 Blood/immunology ICD D50-			
all causes	See heading 2.2	Mortality data	
	by gender and 5-year age band		
2.2.4 Endocrine, E00-E90			
all causes	See heading 2.2	Mortality data	Eudip project: beyond Eurostat 65, include
 diabetes, E10-E14 	WHO-HFA: SDR diabetes (E10-E14)		deaths with Diabetes as 'primary or any
 diabetes, primary or any 	 by gender and 5-year age band 		cause of death' (compatible with Eurostat
cause of death* ; UW-3			shortlist??)
2.2.5 Mental/behavioural, F00-F99			1
all causes	See heading 2.2	Mortality data	
alcohol abuse, F10	by gender and 5-year age band		
drug dependence, F11-F16, F18-F19			
2.2.6 Nervous system/sense, G00			-
all causes	See heading 2.2	Mortality data	
meningitis (other than under	 by gender and 5-year age band 		
inf. Diseases), G00-G03			
2.2.7 Circulatory system 100-199	1	1	
all causes	See heading 2.2	Mortality data	Eurociss project: beyond Eurostat 65

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
• ischaemic heart disease, I20-	WHO-HFA: SDR all causes, ischaemic heart		shortlist include AMI, ICD-9: 410; acute
125	disease (I20-I25), CVA (I60-I69)		coronary syndromes, ICD-9: 410-411
• other heart disease, I30-I33, I39-I52	• by gender and 5-year age band		
• stroke, I60-I69			
• *AMI, ICD-9: 410			
*acute coronary syndromes, ICD-9: 410-411			
2.2.8 Respiratory system, J00-J99			
all causes	See heading 2.2	Mortality data	
 influenza, J10-J11 	WHO-HFA: SDR all causes,		
 pneumonia, J12-J18 	bronchitis/emphysema/asthma (J40-J46), acute		
• COPD, J40-J47	resp. infection children under 5 (J00-J22)		
Asthma, J45-J46	by gender and 5-year age band		
2.2.9 Digestive system, K00-K93			
all causes	See heading 2.2	Mortality data	
ulcer of stomach, duodenum,	WHO-HFA: SDR chronic liver and cirrhosis (K70-		
K25-K28	71, K73-74), appendicitis (K35-K38), hernia etc.		
chronic liver disease, K70,	(K40-K46, K56)		
K73-74	by gender and 5-year age band		
2.2.10 Skin, L00-L99			
all causes	See heading 2.2	 Mortality data; by gender and 	
	by gender and 5-year age band	5-year age band	
2.2.11 Musculoskeletal system, M0			
all causes	See heading 2.2	Mortality data	
 rheumatoid arthritis and 	 by gender and 5-year age band 		
osteoarthrosis, M05-M06,			
M15-M19			
2.2.12 Genitourinary system, N00-I			1
all causes	See heading 2.2	Mortality data	
	by gender and 5-year age band		
2.2.13 Pregnancy etc, 000-099.			
all causes	See heading 2.2	Mortality data	Peristat project: beyond Eurostat 65
• * maternal mortality; UW-9	by gender and 5-year age band		shortlist include maternal mortality; delivery
1	WHO-HFA: mortality of women per 100 000 live		mode in core set, separate causes

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?		Source type, availability	HMP projects, other sources; remarks
	 births, by any cause, during pregnancy or within 42 days after termination of pregnancy; Peristat: same, by maternal age, delivery mode, 10 separate causes 			recommended
2.2.14 Perinatal conditions, P00-P9	6			·
all causes; UW-9	See heading 2.2by gender and 5-year age band	•	Mortality data	Child project: by ages 1, 1-4, 5-9, 10-14, 15-17 age and SES.
2.2.15 Congenital malformations, Q				
 All causes Nervous system, Q00-Q07 Circulatory system, Q20-Q28 	See heading 2.2by gender and 5-year age band	•	Mortality data	Child project: by ages 1, 1-4, 5-9, 10-14, 15-17 age and SES.
2.2.16 Symptoms, ill-defined cause	s, R00-R99			
 Sudden infant death syndrome, R95 Unknown causes, R96-R99 	See heading 2.2by gender and 5-year age band	•	Mortality data	
2.2.17 External causes, V01-Y89				
 Transport accidents, V01-99 Accidental falls, W00-W19 Accidental poisoning, X40-49 Suicide, intentional self-harm, X60-X84 Homicide, assault, X85-Y09 Undetermined intent, Y10-34 *Fatal accidents at work 	 See heading 2.2 WHO-HFA: SDR all causes (separate for children under 5 and 5-19 of age), motor vehicle traffic (V02-04, V09, V12-V14, V20-V79, V82, V84, V85, V89; 4-digit would be needed), work-related accidents (national registrations), suicide and self-inflicted injuries (X60-X84), homicide and intentional injury (X85-X99, Y00-Y09), adverse effects of therapeutic agents (Y40-Y59) by gender and 5-year age band 	•	Mortality data, national registrations for work-related accidents	Injury programme (prelim.): Total injuries as % of total deaths; total injuries per 100,000 of age group; PYLL by injuries as % of total PYLL; age bands 0-14, 15-64, 65+; Child project: ages 1, 1-4, 5-9, 10-14, 15- 17 and SES. More specific on burns and drowning. Beyond Eurostat 65: fatal accidents at work (definition Eurostat)
2.2.18 Certain mortality categories		1		
 Smoking-related deaths; UW-0 Alcohol-related deaths; UW-0 Drug-related deaths; UW-0 	 WHO-HFA: SDR selected alcohol-related causes, selected smoking-related causes, drug- related deaths 	•	Combination of sources	 Smoking- and alcohol-related deaths in HFA include the total of deaths for the alcohol- or smoking –related causes: overestimation; better to be calculated by PAR (population- attributable risk) for each country Drug-related deaths: source EMCDDA

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
2.3 Morbidity, disease-specific			
Diseases/disorders (including injuri many HMP projects which may not	es) are selected as (i) associated with large population be always meet these criteria.	urden or (ii) representing specific avoi	dable causes. Included are suggestions by
The indicator is either incidence or	prevalence (or both) depending on the nature of the disea	ase/disorder.	
interview surveys, special surveys.	ecific registers, notification systems, hospital discharge da		, health examination surveys, health
2.3.1 Infectious/parasitic		, 	
 HIV/AIDS; UW-0 HIV seroprevalence in pregnant women; UW-11 Sexually transmitted diseases, spec. Chlamydia; UW-11 Tuberculosis Measles Meningitis Hepatitis B Vaccination scheme disesases Creutzfeld-Jacob disease 	 Incidence, for HIV/AIDS also prevalence WHO-HFA: incidence tuberculosis (A15-A19); incidence viral hepatitis (B15-B19, separate for A (B15), B (B16), C); incidence syphilis (A50-A53); inc. gonococcal infection (A54); pertussis (A37); measles (B05); malaria (B50-B54); diphteria (A36); tetanus (A35); poliomyelitis (A80); congenital syphilis (A50); congenital rubella (P35.0); neonatal tetanus (A33); rubella (B06); mumps (B26); AIDS incidence (B20-B24); new HIV; Haemophilus influenzae b invasive (G00.0). HIV in pregnancy: % of tested women found positive Chlamydia prevalence: % positive in surveys 15- 19 age m/f By gender, age, region, SES 	 Notification systems HIV in pregnancy, Chlamydia: specific surveys 	 Child project: measles, meningitis selected as tracers for vaccination effectiveness; by gender, 5y age groups up to 15-17 OECD pilot quality indicators: add hepatitis B as tracer for vaccination effectiveness Reprostat project: HIV seroprevalence in pregnancy; Chlamydia prevalence
2.3.2 Neoplasms			
 All cancers Mouth/pharynx/larynx Oesophagus Stomach Colorectal 	 Basically incidence; where possible/useful also prevalence; survival rates in section 4.5.3: quality of care WHO-HFA: new cases of total cancer; trachea/bronchus/lung, breast, cervix cancer 	 HIS Cancer registries (more from Eucan) 	 Reves project: all cancers Child project: incidence for 0-14, 15-17 of age for childhood cancers Eurochip project; also proposed prevalence proportion; definition? Also

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
 Liver Gallbladder/biliary tract Pancreas Lung etc. ; UW-0 Melanoma Breast ; UW-0 Cervix uteri Endometrium Ovary Prostate Testis Bladder Kidney Brain/CNS Thyroid Lymphomas Multiple myeloma Leukemoia Childhood cancers Mesothelioma Kaposi 	By gender, age, region, SES		 proposed: stage at diagnosis: operationalisation (from cancer registries)? Eurochip project: give coverage of cancer registration and % of cases confirmed microscopically
2.3.3 Blood/immunology			
2.3.4 Endocrine			
 Diabetes type 1 in children Prevalence of diabetes; UW-0 	 Incidence by age/100,000 pop. age 0-14 Prevalence per 1000 population; WHO-HFA: prevalence all diabetes (E10-E14); new cases of diabetes per 100 000 	 Registries; inique patient number; capture/recapture; UNN; Primary care; HIS/HES; 	 Eudip project, Reves project Eudip project: questions on doctor info, medication, diets; glucose measurement; ICD-10: E10-E14 Eudip project: visual acuity measure;
Blindness in diabetics	 Annual incidence of blindness from diabetes/total incidence of blindness % of diabetics with proliferative retinopathy last 	RegistryDiabcare, primary care	 cf. 2.3.6 (see also 4.5.3). Child project: 0-4, 5-9, 10-14, 15-17 of age
Retinopathy in diabeticsNephropathy in diabetics	 % of diabetics with ESRF serum creatinine > 400 umol/l last 12 m 	Diabcare, primary care	
All in UW-3	By gender, age, region, SES, where appropriate		

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
 2.3.5 Mental/behavioural Dementia/Alzheimer; UW-0 Depression; UW-0 Generalised anxiety disorder Post-partum depression; UW-9 Alcohol-related disorders Suicide attempt; UW-0 	 12 month prevalence; suicide attempt: lifetime prevalence WHO-HFA: new cases of mental disorder per 100 000 poulation; same for alcoholic psychosis (F10); prevalence of all cases of mental disorder By gender, age, region, SES 	CIDI: depression, anxiety, suicide attempt; HIS: depression, anxiety; CAGE: alcohol dependence:	 Reves, mental health projects Mental health project: alcohol dependence CHILD project: attempted suicide specify for children Peristat: post-partum depression, for development
 2.3.6 Nervous system/sense Cataract Migraine or frequent headache 	12 month and lifetime prevalenceBy gender, age, region, SES	HIS	 Reves project Blindness in diabetics, see 2.3.4
2.3.7 Circulatory system			
 Acute myocardial infarction (AMI); UW-0 Acute coronary syndromes Heart failure Other heart disease (rheumatic, atherosclerosis) Stroke; UW-0 Effort angina AMI case-fatality Stroke case-fatality 	 Incidence per 100,000 population, for all acute causes Prevalence for effort angina, and for past AMI, stroke (latter two by HIS) WHO-HFA: new cases of ischaemic heart disease (I20-I25); cerebrovascular disease (I60-I69) By gender, age, region, SES 	 Hospital discharge data HIS 	 Eurociss project recommended: attack rate; for AMI: 1h, 24h, 28d case-fatality rate; prevalence of effort angina, symptomatic IHD, old IHD, heart failure, ADL prevalence; for stroke: attack rate, 7d, 28-day case-fatality rate; rates by stroke subtype; incidence and prevalence Reves project: HIS for past AMI, stroke
2.3.8 Respiratory system			
 COPD (Chronic obstructive pulmonary disease); UW-0 Childhood asthma Asthma & allergic asthma; also other allergy (not only respiratory) 	 Prevalence WHO-HFA: prevalence all COPD (J40-J47) By gender, age, region, SES 	Surveys, HIS/HES	 Child project: 5y age bands, up to 15- 17 Reves project (HIS for asthma, COPD)
2.3.9 Digestive system		1	
Dental healthGastric or duodenal ulcerWater and foodborne	 Dental: mean DMF-12 index WHO-HFA: DMFT (no of decayed, missing or filled teeth at age 12); % of caries-free children at 	 dental: school health services; surveys ulcers: HIS, registries 	 Child project: DMFT index for 5y and 12y old Reves project: HIS for ulcers

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
infections; UW-14	 age 6 (or 5) WHO-HFA: foodborne infections: no of outbreaks; incidence per 100 000 Ulcers: 12 month and lifetime prevalence Infections: incidence all by gender, age, region, SES 	 infections: registries 	WHO: % caries-free children may replace DMFT
2.3.10 Skin			
2.3.11 Musculoskeletal system			
 Rheumatoid arthritis; UW-6 Osteoarthritis; UW-6 	 RA: incidence, prevalence; based on clinical diagnosis OA: prevalence for hip and knee; Reves: 12 month and lifetime prevalence By gender, age, region, SES 	 RA: HES + laboratory tests; OA: HIS and HES 	 MSC project; OA for hip and knee are the most important for disability and care need Reves project: combined category in HIS Osteoporosis: see 3.1.1
2.3.12 Genitourinary system			
 Urinary incontinence in women; UW-11 Erectile dysfunction; UW-11 	 % women reporting UI at least one episode/ month in three previous months, 40-49 age % men reporting ED age 40-70 	• HIS	Reprostat project (not in core set)
2.3.13 Pregnancychildbirth			
 Problems in getting pregnant; UW-11 Deliveries with ART (assisted reproductive technology); UW-11 severe maternal morbidity; UW-9 trauma to perineum; UW-9 chronic fecal incontinence; UW-9 	 problems getting pregnant: % of women age 15- 49 trying to get pregnant > 1 year ART deliveries: % women delivering live or stillborn after ART (range of techniques) by gender, age, region, SES 	 problems getting pregnant: special surveys deliveries after ART: birth registers, linked with ART registers 	 Reprostat project: problems getting pregnant; deliveries after ART; latter not in core set Peristat project: maternal morbidity, perineum trauma, fecal incontinence for development
2.3.14 Perinatal conditions			
 (low) birth weight; UW-0, UW-9 pre-term births; UW-9 multiple birth rate; UW-9 APGAR score; UW-9 	 WHO-HFA: % of live borns weighing 2500 g or more. Peristat: distribution of birthweight; % of live and stillbirths within 500g intervals, by vital status, gestational age and plurality 	Registries	 Peristat project Peristat project: subdivide preterm by 22-27, 28-32, 32-36 weeks; singleton preterm rate is best suited for country comparisons.

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
Cerebral palsy; UW-9 Hypoxic-ischemic encephalopathy; UW-9	 Peristat: distribution of gestational age; % of live and still births after 22-36 weeks (preterm), 37-41 weeks (term), 41+ weeks (postterm), by vital status and plurality Multiple birth rate; % of maternities following multiple gestation, including stillbirths, by no of fetuses APGAR score: distribution at 5 min. after birth Prevalence for cer. palsy and encephalopathy 		Peristat: cerebral palsy and encephalopathy for development
 2.3.15 Congenital malformations Down's syndrome; UW-9 Neural tube defetcs; UW-9 	 Peristat: % of live births, fetal deaths and induced abortions with neural tube defects or Down's WHO-HFA: all congenital anomalies per 100 000 live births; same for Down's syndrome 	 Eurocat-like registers, hospital discharges 	Peristat project: inclusion of fetal deaths and abortions needed to see true incidence (ECHI note: for disease burden surviving fraction should be known)
2.3.16 Symptoms			
 2.3.17 External causes Road traffic injuries; UW-0 Occupational injuries; UW-0 Home/leisure injuries; UW-0 Burns in children Poisoning in children Long-bone fracture in children Hip fracture; UW-6 Alcohol-related traffic accidents 	 Incidence for all issues WHO-HFA: number of road traffic accidents with injury per 100 000; number of persons injured in road traffic accidents, in work-related accidents, in home/leisure accidents, per 100 000 population by gender, age, region, SES Burns as overnight in-patient admissions per 100.000 pop. Poisoning as overnight in-patient admissions per 100.000 pop. long-bone fractures in children, per 100.000 population (ICD) WHO-HFA: Alcohol-related road-traffic accidents: accidents per 100.000 	 Hospital admissions/discharges and emergency departments Hospital discharge data 	 Check recent comments injury group Attempted suicide: see 2.3.5 IPP programme (prelim.); age groups 0-14, 15-64, 65+ Child project: burns, poisoning, 5y age bands, up to 15-17; long-bone fractures, 10-14, 15-17 Occupational accidents/injuries: Eurostat.
2.3.18 Certain morbidity categorie			
Occupational disease	 WHO-HFA: new cases per 100 000 Incidence, for 9 disease classes 		WHO: such as dermatosis, silicosis, asthma, cancer, infections, poisonings, consequences of noise, vibration,

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
			excessive loads, etc.
			 Eurostat: 9 classes, also Efilwc
consequences of health as functioning, as related to he	health; This section includes indicators not based on IC e.g. defined by the ICF (International Classification of Fu ealth. This includes the physical, mental and social aspec n contains very little focus on the specific situation of chil	nctioning). Indicators are selected as c ts of health. It also includes the notion	overing the important domains of human
2.4.1 Perceived health			
 Perceived general health; UW-0 	 WHO-HFA: % of population with self-assessed health as 'good'. Prevalence; general health % in 5 categories from WHO question; by gender, age, region, SES. 	• HIS; for general health: WHO question 'how is your health in general?' (very good, good, fair, bad, very bad).	Reves
 Perceived sexual health; UW-11 	No operationalisation	•	Reprostat project: future development
2.4.2 Chronic disease general			
 Suffering from any chronic illness or condition; UW-0 	 Lifetime or 12 mnth prevalence by gender, age, region, SES. 	• HIS	 Reves project: global question Reves also recommends questions on specific conditions (also mentioned in section 2.3): Asthma Allergic asthma Allergy (excl. asthma) Diabetes Cataract Hypertension Heart attack Stroke Chronic bronchitis, emphysema Arthrosis, (rheumatic) arthritis Osteoporosis Gastric, duodenal ulcer Malignant tumour Migraine/frequent headache

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
			Chronic anxiety or depression
 Self-reported musculoskeletal pain; UW-0, UW-6 	% score from HIS instrument	HIS instrument proposed by MSC project, questionnaire on 10 pain locations, with time dimension	MSC project
	ably items should include all relevant domains of ICF (see ons, sleep, pain, personal relations, social functioning; the		
Physical functional limitations; UW-0, UW-6	 Prevalence of physical functional limitations in the following domains: Seeing (read newspaper, recognise face) Hearing (conversation one person) Mobility (walk 500 m, stairs) Speaking Biting/chewing Agility (reach, grasp, turn tap, bend/kneel, carry 5 kg) All by gender, age, region, SES WHO-HFA: % population with long-term disability 	HIS; instruments proposed by Reves	Reves project
Cognitive functional limitations	 Prevalence of cognitive functional limitations: Memory (3 items) New learning Language Literacy/numeracy Attention Visuo-spatial ability Executive function All by gender, age, region, SES 	HIS; instruments proposed by Reves	Reves project
2.4.4 Activity limitations		·	
 Limitations of usual activities, past 6 months, health related; UW-0, UW-6 	 Usual activities past 6 months: GALI instrument (general activity limitations instrument) Prevalence by gender, age, region, SES 	HIS; instruments proposed by Reves	 Reves project:: instruments proposed, aimed at 'usual' situation, ignoring temporary problems
 Limitations in personal care; UW-6 	 Personal care items: feed, in/out bed, dress, toilet, bath; with/without help Prevalence by gender, age, region, SES 	HIS; instruments proposed by Reves	•

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
Limitations in household activities	 Household activities items: telephone, shopping, cooking, light/heavy housework, laundry, finances Prevalence by gender, age, region, SES 	HIS; instruments proposed by Reves	•
Limitations in school, work, leisure, social activities	 School etc. items: usual school/work/home activities, usual leisure/social activities, going out Prevalence by gender, age, region, SES WHO-HFA: % of population with long-term incapacity to work 	HIS; instruments proposed by Reves	•
Limitations of activities due to circulatory disease	•	•	 Eurociss project adds item on circulatory disease
2.4.5 Short-term activity restriction	15		
Temporary limitation of usual activities by health problem, during past 2 weeks	 Incidence by gender, age, region, SES; WHO-HFA: no of days with temporary disability/person/year 	• HIS	WHO recommended instrument
	ee mental health project; put this under functional issues		
Psychological distress; UW-0	% population below cutpoint	HIS; MHI from SF-36	 Reves and mental health projects; EuroHIS
Psychological well-being	% population below cutpoint	 HIS; energy, vitality from SF- 36 	 Reves and mental health projects; EuroHIS
Happiness	 Happiness: % population in upper 2 out of 5 response categories 	HIS Andrews single item	Reves and mental health projects
Role limitations by emotional problems	•	HIS; item from SF-36	 Reves and mental health projects; EuroHIS
2.4.7 General quality of life			
Euroqol instrument Euroqol for circulatory disease patients	•	•	 ECHI subgroup: Current instruments cover much of the above items. Possible instruments are Euroqol and WHOQOL. At present no indicators are recommended in this heading. Eurociss project: Euroqol score related to heart disease and stroke
2.4.8 Absenteeism from work		Drahably facus on UIC	Os ma saskilite a sklematis ku
Absenteeism from work	 main groups of causes: mental, musculoskeletal, infectious, other. WHO-HFA: days per employee per year 	 Probably focus on HIS sources for best comparability (e.g. Labour Force Survey); 	 Comparability poblematic by differences in social systems

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
		sick leave statistics	
Work disability; UW-6	 Permanent and temporary work disability, according to diagnosis WHO-HFA: new invalidity/disability cases per 100 000(granted social benefits); persons receiving social/disability benefits per 100 000; % of disabled in working age engaged in regular work 	Statistics, insurance data	Comparability poblematic by differences in social systems
disease-specific or functional terms numbers of years with disease or d	ealth status; This section includes indicators which are of . . Basically there are two types: (1) Health expectancies (is ability. Especially HE-s are useful for overall comparison is a second to the second seco	HE), which are life-table based, and (ns of health of countries or regions.	2) DALY-type measures, based on absolute
 HE based on perceived general health (cf. 2.4.1); UW-0 HE based on any chronic condition (cf. 2.4.2); UW-0 HE based on limitations past 6 months (cf. 2.4.3, GALI); UW-0 HE based on physical; UW-0 limitations Other HEs based on items in section 2.4 	WHO-HFA: disability-free life expectancy	health data given in section 2.4. We variants based on functional health expectancy). For development, ECI severity-weighted and disease-spec	e (HE) can be calculated on all functional e recommend firstly a few commonly used HE measures (e.g. disability-free life HI recommends a variant also based on cific data (called HALE, Health-Adjusted Life veloped by WHO/HQ and has a much larger
	Class 3. Determina which determines health and disease/disorder; issu problem, on population basis, and (ii) can be influer	ies are selected because they (i)	
	ctors; this group includes hereditary or acquired charact	- -	
3.1.1 Biological (risk) factors; the	s group includes physical characteristics, for which a stro	ng association with substantial health	n problems have been established.
 Body mass index; UW-0, UW- 3; UW-6; UW-14 	WHO-HFA: % with MBI over 30Mean/sd of BMI	 measurement of weight and height in HIS/HES 	EHRM project; Child project; EUDIP project: HES preferable over self-

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
	 Prevalence of obesity: % of general population >= 30 kg/m2 (Eudip) % of children overweight or obese at school entry by gender, ages 25-75 by 10y groups 	School health survey	report HIS PHnut project
Waist/hip circumference; UW- 14	Waist circumference; Mean and sd	• HES	PHnut project
 Sagittal abdominal diameter; UW-14 	Waist-hip ratio	• HES	PHnut project
Blood pressure; UW-0	 WHO-HFA: % population with bp over 160/95, including those under hypertension treatment. Mean/sd of systolic BP Mean/sd of diastolic BP Prevalence of actual and potential hypertenives: % with SBP over 140 mm Hg or DBP over 90, or taking antihypertensive drugs 	 HES: from 2nd and 3rd of 3 measurements; question on drug-taking 	EHRM project: gender, ages 25-74 by 10y groups, SES, region? More secondary indicators recommended; Reves project
Serum cholesterol total; UW14	 WHO-HFA: average total chol. Level Mean/sd of serum total cholesterol (mmol/l) Prevalence of serum total cholesterol over 5 mmol/l gender, ages 25-74 by 10y groups; SES? 	• HES	 EHRM project; cut-point based on international standards; More 'secondary indicators' recommended PHnut project
Cholesterol fractions; UW-14	Follow EHRM	• HES	EHRM;PHnut project
 Glucose tolerance; UW-3 Risk factors in people with diabetes; UW-3 	 Prevalence of impaired glucose tolerance % with HbA1c > 7.5% last 12 m % with total cholesterol > 5 mml/l % with LDL> 2.6 mmol/l (>3 mmol/l) % with HDL<1.15 mmol/l (<1 mmol/l) % with triglycerides >2.3 mmol/l (>2 mmol/l) % with micralbuminuria last 12 m % with blood pressure >140/90 last 12 m % with BMI > 25, > 30 kg/m2 age at diagnosis, 10 year age bands 	 HES, primary care Diabcare, sentinel practices, unique patient number, reimbursements 	Eudip project Eudip project
Nutritional status indicators; UW14	 Mean/sd of glycated Hb concentration Serum ferritin, transferrin receptors, retinol, carotenoids, folate, selenium, 25-hydroxy vitamin 	• HES	 EHRM project; 'secondary indicator in EUDIP project. PHNutritional health project:

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
	D3		 ECAHI: folate, iron, vitamin D, iodine, sodium
 Health-related fitness; UW-14 	 Maximal aerobic power: by 2 km walk test 	Walk test	PHnut project
Osteoporosis; UW-6	 Prevalence of low bone density (cut-off? Precise method definition?) 	• HES	MSC project
	Prevalence of osteoporosis;By gender, age, region, SES	• HIS	Reves project
	roup includes several mental or cognitive personal charac experience with these indicators in general monitoring. It		idence that it influences mental or physical
Sense of mastery	 % of population exceeding cutpoint of scale, satisfactory All data by gender, age, region, SES 	• HIS	Mental health project: 7-item scale of Pearlin et al
Optimism	 % of population exceeding cutpoint of scale, being 'optimist' All data by gender, age, region, SES 	• HIS	Mental health project: Life Orientation Test-revised (LOT-R), 6 items
Knowledge/attitudes on health issues	 Awareness of risk from UV radiation Awareness of smoking, alcohol, physical inactivity and other lifestyle risks 	• HIS	Eurochip projectAdded by ECHI
established. They are also assume 3.2.1 Substance use	ection includes a set of behavioral factors for which a clea d to be susceptible to appropriate health promotion interve	entions.	
 Regular smokers; UW-0, UW- 6 	 WHO-HFA: % of regular daily smokers, age 15+ by gender, age, region, SES; EHRM: % daily cigarette smokers 	• Survey	 Child project: children smoking every week, gender, ages 11, 13, 15, SES Eurochip project: smokers among 'adults' and 10-14 year olds EHRM project: prevalence of daily, ex- and never smokers for all forms of smoking; prev. of daily cigarette smokers separately
% former smokers	•	•	

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
% never smokers	•	•	•
amount smoked	 WHO-HFA: % adults smoking 20 cigarettes/day; Average no cigarettes/person/year 	•	•
 % pregnant women smoking; UW-0, UW-9 	% women smoking during third trimester	Survey, birth register	Peristat project
Occasional smokers, smoking frequency	•	•	•
 smokers among diabetics; UW-3 	•	Diabcare, sentinel networks	EUDIP project
Alcohol use: non drinkers; UW-14	 WHO-HFA: % non-drinkers in population By gender, age, SES, region 	• HIS	HIS/HES project; PHnut project
 Alcohol: heavy drinking; UW- 0, UW-14 	 WHO-HFA: % of adults consuming 50+ g ethanol/day % and frequency of heavy drinking 	• HIS	Regular/binge? HIS project: frequency per week/month; PHnut project
Drinking in children; UW-0, UW-14	% age 15 who were drunk twice or more; by gender, SES	• HIS	Child project
Total alcohol consumption; UW-0, UW-14	WHO-HFA: litre pure alcohol/person/year	 Sales statistics (but: illegal production!) 	ECAS project; Efcosum; PHnut project
Drinking pattern with meals; UW-14	% used as toxicant/with meals	• HIS	PHnut project
Energy intake by alcohol; UW- 14	% energy from alcohol intake	HIS, sales statistics	PHnut project
(II)licit drug use; UW-0	 WHO-HFA: first admission to drug treatment centres per 100 000; Lifetime prevalence for cannabis, cocaine, ampht, ecstasy, other illicit 	HIS, other	 Eurostat/EMCDDA; better include month/year prevalence;
Drug use in children; UW-0	% 15y schoolchildren reporting cannabis last 30 days), heroin, ecstasy (ever); by gender, SES	HBSC survey	Child project
	ance use' the focus is on negative effects on health, nutrit		
	1, DAFNE and Public Health Nutrition projects, Eurodiet ta		
	FCOSUM: intake from for individual survey, 24h recall is t are more widespread than individual surveys but cannot		
Total energy uptake; UW-14	WHO-HFA: Energy uptake, in calories	FAO; complement with	Dafne project
		• • • •	· · ·

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
	/person/day	individual surveys?	
% energy from total fat (lipids); UW-14	 WHO-HFA: calculated from total fat in food available for consumption 	• FAO	Efcosum, Dafne projects
% energy from sat. fatty acids; UW-14	 PHnutrition: % population with diet SFA content > 10% energy intake 	•	Efcosum, PHnut, Dafne projects
Poly- and mono-unsaturated fatty acid content of typical diet; UW-14	 PHnut: % population with diet below 7-8 % energy from Pufa PHnut: % diet with low Mufa 	•	PHnut, Dafne
% energy from protein; UW-14	 WHO-HFA: calculated from total protein in food available for consumption 	• FAO	Dafne: delete
 Intake of bread/cereals; UW- 14 	 WHO-HFA: consumption of cereals, kg/ person/day; by gender, age, region, SES 	 WHO: FAO Efcosum, Dafne: food consumption survey, HBS 	Efcosum, Dafne
 Consumption/availability of fruit excl. juice; UW-0, UW-14 	 WHO-HFA: consumption of vegetables and fruits, kg/person/day Efcosum: kg/person/day; PHnutrition: also % population below intake 100g/day by gender, age, region, SES 	 WHO: FAO Nutrition projects: food consumption survey, HBS 	 Efcosum, PHnut, Dafne; suggestion ECHI: both average g/person/day and % population below limit
 Consumption/availability of vegetables excl. potatoes; UW-0, UW-14 	 WHO-HFA: see fruit intake Efcosum: kg/person/day; PHnutrition: also % population below intake of < 300g/day Dafne: separate out pulses by gender, age, region, SES 	 WHO: FAO food consumption survey, HBS 	 Efcosum, PHnut, Dafne; suggestion ECHI: both average g/person/day and % population below limit
Consumption/availability of fish; UW-14	 Efcosum: kg/person/day; PHnutrition: diets containing < 200g fatty fish/week by gender, age, region, SES 	 food consumption survey, HBS 	 Efcosum, PHnut, Dafne; suggestion ECHI: both average g/person/day and % population below limit
Consumption/availability of meat and meat products; UW- 14	 PHnutrition: av. Intake of > 80g red meat/day (?) by gender, age, region, SES 	 food consumption survey, HBS 	 PHnut, Dafne; suggestion ECHI: both average g/person/day and % population below limit
Intake of non-starch polysaccharides; UW-14	 Average diet with less than 25 g/day of NSP (?) by gender, age, region, SES 	 food consumption survey, HBS 	 PHnut; suggestion ECHI: both average g/person/day and % population below limit

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
 Consumption/Availability of other items: eggs, milk (products), pulses, potato (products), nuts, juices, added lipids, sugar (products), alcoholic, non-alcoholic beverages; UW-14 	• G/person/day	 HBS: these items are available in the database anyhow 	• Dafne
Intake of vitamin D, folate, iron, iodine, sodium; UW-14	Measured as biomarkerBy gender, age, region, SES	HES/biomarkers; see also 3.1.1	Efcosum; operationalisation?
Vitamin content of typical diet; UW-14	 Diet with vitamin C, D, E, folate, carotenoids below recommended levels by gender, age, region, SES 	 Food consumption surveys, or HES/biomarkers; see also 3.1.1 	PHnut
Mineral content of typical diet; UW-14	Diet with levels of Fe, I, Ca, Se below recommended levels	HES/biomarkers; see also 3.1.1	PHnut
Meals taken out of home; UW- 14	% meals taken out of home	•	Dafne
 Intake of contaminants in food; UW-14 	 Presence of selected contaminants in selected food items, related to threshold 		 ECEH; food sample surveys; select contaminants
3.2.3 Other health-related behavior health problems	viours; this group includes other behavioral factors, not re	lated to substance use or nutrition, wh	nich have been shown to influence serious
 Physical activity; UW-0, UW-6; UW-14 	 HIS project: active leisure time activities; work up sweat > 3 days a week; Eupass project: use IPAQ (international physical activity questionnaire); PHnut project: total amount, time with enhanced activity, time sitting, environmental determinants of PA, following IPAQ environmental module CHILD: % children reporting vigorous activity outside school min. 2h/week; by gender, ages 11, 13, 15, SES 	 HIS CHILD: HBSC 	 HIS/HES, Eupass, PHnut, Child projects
Sexual behaviour: partners, frequency; UW-11	ave. no of partners,frequency/week		•
 Median age at 1st intercourse; UW-11 	 Proportion of boys/girls with penetrative sex experience age 15-19 	Youth health surveys	Reprostat project

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
Contraceptive use; UW-11	 condom use (Reprostat): % of respondents having high-risk sex with condom % contraceptive use at 1st intercourse (Reprostat): % reporting contraceptive use at 1st intercourse in age 15-19 other contraceptive use (Reprostat): % of women 15-49 using any contraceptive at a point in time 	 youth health surveys; population surveys 	 data given by Eurostat; Reprostat project: condom use is core indicator in UNAIDS
 Breastfeeding; UW-0, UW-14, UW-9 	 WHO-HFA: % of 3-mnth-old; % of 6-mnth-old breastfed % newborns breastfed and exclusively breastfed first 48 hours (Peristat def.) % 6-mnth-old breastfed % 6-mnth-old exclusively breastfed % 12-mnth-old breastfed 	 hospital data, child health services, HIS 	 PHNutrition project, CHILD project, Peristat project
Exposure to UV	•	•	Eurochip??
Induced abortions	No and rates of legal abortions per 100 live births		 By mother's age; recommendations reprostat project follow
Traffic behaviour			Seatbelt use? Helmet use?
Behaviours related to injuries/accidents			IPP programme (prelim.)
been established. The size of the he the reguirement of a high level of he 3.3.1 Physical environment; for health indicators develope	tions; this group includes aspects from the outside enviro ealth problem may not be as large as in the previous sect ealth protection by legal or regulatory measures. this group, large lists of environmental health indicators h d by WHO-ECEH (european Centre of Environment and alth is relatively direct and substantial. This is not yet upda	tion, but here we have, in general the ave been developed. Most indicators Health), draft of 2000. Here we select	case of unvoluntary exposition, which implies given are from the core set of environmental ted a limited number from this core set, for
PM10 exposure	PM10 emissions	Emission registry	Eurochip project (cancer risk)
PM10 exposure in children	 % children 0-14 living in localities with annual mean >40 ppm of PM10 	Combination of sources	Child project
Other outside air pollutants	 WHO-HFA: SO2 emissions, kg/person/year Exceedance of limits for reference pollutants 	Monitoring	ECEH: weighted exceedance of reference values for NO2, PM10, SO2,

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
			O3; second choice: annual emissions
 Indoor tobacco smoke exposure 	 prevalence of population exposed to environmental tobacco smoke 	Household surveys	Eurochip project (cancer risk)
Indoor tobacco smoke exposure: children	 % of children aged 0-4 in smoking household; by SES 	Household surveys	Child project
 Indoor radon exposure 	•	•	 Eurochip project (cancer risk)
Housing; UW-0??	 WHO-HFA: Number of persons/room; average living area per person Floor area/person, population living in substandard housing 	• UN/ECE	WHO-HFAECEH
Environmental determinants of physical activity	•		•
Drinking water supply	 WHO-HFA: % population on piped water; total, urban, rural 	WHO-Euro programme	• ECEH
Sewage system	 WHO-HFA: % population on adequate excreta disposal % of wastewater adequately treated. 	WHO-Euro programme	• ECEH
Ionising radiation	% population receiving cumulative dose >5 mSc/year (constructed)		• ECEH
Noise exposure	% population annoyed (6 sources of noise)		ECEH
	 derived from the European Foundation for the Improvem et included; for accidents at work and occupational diseas Prevalence of occupational exposure to carcinogen 		 <i>(Efilwc); also in the core indicators of ECEH;</i> Eurochip project
Workplace exposure to vibrations, noise, other; UW-6	Prevalence		• Efilwc
Workplace exposure to tobacco smoke	•		•
 Inconvenient/health damaging working positions; UW-6 	•		•
 Mental stress factors at work; UW-6 	 Tight time constraints, violence, stress, monotony, general satisfaction 		• Efilwc

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
	nent; this section includes social factors for which a clear- a typical development area.	cut association with health (mental and	d physical) has been established. In terms of
Social support	% population with poor, moderate, strong social support in a year	• HIS	 Mental health project: Oslo 3 item social support scale; gender, age group, region, SES
Social isolation/participation	% population exceeding cutpoint	• HIS	 Mental health project: 4 item scale of Statistics Canada; ECHP: contact with neighbours/others; participation in activities/associations
Parental support for children	 % children easily talking about problems with parents 	Survey (HBSC)	 Child project: by gender, age 11, 13, 15, SES; strong association with problem behaviours
Children in (social) care	% children in care or formal supervision in social welfare agencies	Agency registry; international comparison difficult	 Child project: indicator for social disruption and child vulnerability; gender, 5y age bands up to 15-17
Early school leaving	% children leaving school before statutory age	Education statistic (feasible?)	 Child project: association with mental and social problems; by gender, age group
 Pre-primary educational enrolment 	% children aged 3 and under 5 in pre-primary education	Survey, registry	 Child project: association with later achievements; by gender, SES; (ECHI: cultural bias??)
Life events	% population with at least one event during last 12 months	• HIS	Mental health project: Shortlist of life- threatening events; by gender, age, region, SES
Experience of violence		Survey; police reports	People experiencing violence of specific kinds; police reports: reported incidents (comarable?)
Experience of sexual abuse and violence; UW-11	Reprostat: violence during pregnancy	Not yet operational	Reprostat project

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks			
Class 4. Health systems This class should indicators covering activities in prevention and health promotion (4.1) as well as aspects of the health care system (4.2-4.5). It should also cover indicators of the quality of the health system and of 'health system performance'. In the sections on health care services, the categories currently listed by OECD and the System of Health Accounts are largely followed.						
4.1 Prevention, health protect	tion and health promotion.					
interventions occurring within the h	ange this hierarchy, by taking out the 'health promotion p ealth services, including health care and disease prevent parate chapter 5, Called: 'Health Promotion'. This has not	tion (4.1.1, 4.2-4.5) and health interven	tions outside the health care system (4.1.2,			
4.1.1 Disease prevention; this g consensus of their positive	roup includes indicators on the implementation of preven e effects on health	tion activities which are or are becomi	ng widely applied, based on broad			
 Vaccination coverage children; UW-0 	 WHO-HFA: % of children immunised against: diphteria, tetanus, pertussis, measles, poliomyelitis, tuberculosis, Hib, hepatitis B, mumps, rubella. % children 24-35 months with completed vaccination courses for: DKTP, Hib, BMR, hepatitis B, Men. C (CHILD) % children completing basic vaccination programme (OECD) All data by region, SES 	Registers	Child project; OECD pilot quality indicators			
% influenza vaccination coverage	by gender, age, region, SES	•	•			
Breast cancer screening; UW-0	Coverage	Survey	 Eurochip project: many screening variables to be defined OECD pilot quality indicators 			
 Cervical cancer screening; UW-0 	Coverage cervical screening age 20-69, within past 3 years (OECD)	•	Eurochip project;OECD pilot quality indicators			
Colorectal cancer screening	Coverage	•	Eurochip project			
Screening for blood pressure	% of population with blood pressure	HIS	EHRM project:			

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
	measurement in past 5 years; by gender, ages 25-74 by 10y groups, SES		
Screening for serum cholesterol	 % of population with cholesterol measurement in past 5 years; by gender, ages 25-74 by 10y groups, SES 	• HIS	EHRM project
Antihypertensive drug treatment	 prevalence of antihypertensive drug treatment among actual and potential hypertensives; prevalence of antihypertensive drug treatment in the population (cf. 4.3.4) EHRM project: gender, ages 25-74 by 10y groups, SES 	• HIS	• EHRM
Iipid lowering drug treatment	 prevalence of lipid-lowering drug treatment in the population; EHRM project: gender, ages 25-74 by 10y groups, SES 	• HIS	• EHRM
 Osteoporosis prevention drug treatment; UW-6 	Defined daily doses (ATC M 05 B)	Sale statistics, prescripitions	MSC project
 Testing for complication prevention in diabetics; UW-3 	 % tested for HbA1c last 12 m % tested for lipid profile last 12 m % tested for micralbuminuria % with blood presure tested last 12 m % with retina fundus inspection last 12 m % with serum creatinine test last 12 m 	 Diabcare, sentinel networks, unique patient number 	Eudip project
Hormone replacement therapy (HRT); UW-11	 % of women aged 45-49 using peri- and post- menopausal hormone medication; 5-y age groups 	• HIS	Reprostat project: not in core set
Counseling on smoking General preventive examination	•	• HIS	EHRM Eurostat: 10 items, +6 in women
Prenatal screening			By age of mother; not recommended by Peristat
Prenatal care attendance; UW-9	 Distribution of timing of first antenatal visit by trimester of pregnancy, for all women delivering live or stillbirth 		Peristat
HIV testing among pregnant women; UW-11	 % of pregnant women attending antenatal care who accept HIV screening 	 laboratory records 	Reprostat

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
Neonatal screening			By age of mother; PKU, other; not recommended by Peristat
Integrated children's health monitoring			Not recommended in Peristat or Reprostat projects
indicators should be clearl	up includes indicators on the implementation of health pro y related with the effectivity of the interventions. This is cl d on a broad perspective of health promotion. See note u	learly a development area. The EUH	PID project will recommend indicators in this
Nutritional policy; UW-0, UW- 14	Nutritional policy and statutory legislation	•	PH Nutrition project
 Nutritional fortification; UW- 14 	 Nutritional intervention: fortification; i.e., monitoring of fortification practices such as iodine in salt, iron in cereals 	•	PH nutrition project
 Policies and campaigns on health behaviours (smoking,alcohol, diet, safe sex, drug use, sunlight exposure, physical activity, injury prevention etc); UW-0 	•	•	
EHRM: Awareness of elevated blood pressure, of elevated serum cholesterol	•	Survey	EHRM project: by gender, ages 25-74 by 10y groups, SES
 Integrated programmes in settings e.g. schools, workplaces, etc.; UW-0 	•	•	•
Mental health promotion	•	•	 Mental health project: decreasing suicide rate; supporting parental skills
Physical punishment of children	 % children protected by law against physical punishment, as % in school or regular families 	Knowledge of statutes	 Child project (ECHI: useful and feasible indicator? Cultural bias?)
Anti-bullying policies in schools	% of children in schools with written anti-bullying policy/all schoolchildren	mixed sources	Child project

	Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?		Source type, availability		HMP projects, other sources; remarks
4.1	regulation is being develo and that have been docur	up includes indicators on the implementation of legislatio ped at the EU level. From a vast array of possibilities, a f nented as (cost-) effective. This is also the area of 'health ject will give recommendations; See note under heading	ew is h in ot	sues have been selected that a her policies' and 'health impac	are ass t asse:	sociated with substantial health effects
•	Regulations on public smoking	 Presence of smoking restriction in 9 types of buildings/situations Existence and enforcement of laws/regulations to protect children from tobacco smoke exposure in public places (composite index?) 	•	Info on regulations/laws	•	ECEH Child project: include pregnancy, schools, day-care, public places, transport, hospitals, theatres, museums, restaurants, smoking advertisement (ECHI: the latter is a separate indicator; do not restrict all this to children)
•	Smoking advertisement restrictions (also include alcohol)?	Existence and enforcement of laws/regulation to inhibit tobacco advertisement	•	Info on regulations/laws	•	Child project: for children; ECEH
٠	Tobacco prices					
٠	Regulations on alcohol and driving	Allowed limit of alcohol level in blood				
•	Regulation on seat belts, cycle helmets	Existence and inforcement of regulation for safe transport of children (proposal for composite index)	•	Various sources	•	Child project: include safety seats in cars, safety belts, (motor)cycle helmets, appropriate speed limits, safe walking/cycling plans
•	Policies on healthy/safe nutrition, e.g. food/drink fortification	•	•		•	
•	Regulations on food safety and quality				•	Implement by ECEH
•	Regulations on air/water quality				•	Implement by ECEH
•	Regulations on noise	 Existence of policies for reducing noise exposure of babies and young children (proposal for composite index) General regulations 	•	Environmental agencies	•	Child project: include intensive care units, day-care centres, schools, kindergartens Implement by ECEH

In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
Regulations on lead exposure	Existence of regulation limiting use of lead in building etc. materials and establishing biomoitoring (composite index proposed	Environmental agencies	Child project
4.2 Health care resources; in	this section, OECD and HFA listings have been largely fo	llowed;	
4.2.1 Facilities			
Hospital beds total	WHO-HFA: Number, per 100,000By region	Registers	WHO-HFA: also % private inpatient hospital beds
Hospital beds acute care	WHO-HFA: Number, per 100,000 By region	Registers	•
Psychiatric care beds	WHO-HFA: Number, per 100,000By region	Registers	 Mental health project: Eurostat definition (being revised)
 Nursing/elderly home care beds 	WHO-HFA: Number, per 100 000by region	Registers	•
Stroke units	•		•
100 Manua average in alignet			
element and quality of care. Other	 group recommended by the manpower project, with aid of aims: role in production/income/economic growth. Bottom onnel shortage may be more appropriate than unemployr No. of persons; per 1,000 population; % of total employment 	m group of indicators indicated by M	anpower project as of lower priority. ECHI
element and quality of care. Other suggestion: some measure of pers	 aims: role in production/income/economic growth. Botton onnel shortage may be more appropriate than unemployr No. of persons; per 1,000 population; % of total 	m group of indicators indicated by M nent from the point of view of quality National register, hospital 	 anpower project as of lower priority. ECHI of care or health system performance. Manpower project: by head counts, fte,
 element and quality of care. Other suggestion: some measure of pers Health services employment 	 aims: role in production/income/economic growth. Botton onnel shortage may be more appropriate than unemployr No. of persons; per 1,000 population; % of total employment Total employment in general hospitals, mental health and substance abuse hospitals, other specialty hospitals Total employment in facilities for nursing care, residential mental retardation, mental health & substance abuse, elderly community care, other residential care 	 m group of indicators indicated by M nent from the point of view of quality National register, hospital statistics 	 anpower project as of lower priority. ECHI of care or health system performance. Manpower project: by head counts, fte, gender same; question ECHI: not indicated
 element and quality of care. Other suggestion: some measure of pers Health services employment Hospitals employement Nursing and residential care 	 aims: role in production/income/economic growth. Botton onnel shortage may be more appropriate than unemployr No. of persons; per 1,000 population; % of total employment Total employment in general hospitals, mental health and substance abuse hospitals, other specialty hospitals Total employment in facilities for nursing care, residential mental retardation, mental health & substance abuse, elderly community care, other 	m group of indicators indicated by M ment from the point of view of quality • National register, hospital statistics • Same	 Annower project as of lower priority. ECHI of care or health system performance. Manpower project: by head counts, fte, gender same; question ECHI: not indicated per 1,000 population, on purpose??

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
other providers of medical goods	sale and other suppliers of optical glasses, hearing aids, other medical appliances, other sale of pharmaceuticals and medical goods		
Provision and administration of public health programmes	Provision and administration of public health programmes	• Same	• Same
General health administration	 Government administration of health, social security funds, other (social/private) insurance, other prividers of health administration 	• Same	Not indicated; only head count or fte?
Hospital staff ratio: acute care	Hospital staff/number of beds	Same	Manpower project: staff from hospitals as indicated above only
Nurses staff ratio: acute care	Hospital nurses staff/number of beds	• Same	 Manpower project: staff from hospitals as indicated above only
Physicians employed; UW-0	 WHO-HFA: Numbers and fte, per 100,000 population By region 	• Same	 Manpower project: no priority; WHO: also proportion of physicians working in hospitals; and number of GP's per 100 000
Nurses employed; UW-0	 WHO-HFA: Numbers and fte, per 100,000 population By region 	• Same	 Manpower project: no priority WHO: also proportion of nurses working in hospitals
Midwives employed	 WHO-HFA: Number and fte, per 100,000 population By region 	• Same	Manpower project: no priority
Dentists employed	 WHO-HFA: Numbers and fte, per 100,000 population By region 	• Same	Manpower project: no priority
Pharmacists	WHO-HFA: Number, per 100,000 population By region	Same	Manpower project: no priority
Paramedical professions	Number, per 100,000 population	Same	Manpower project: no priority
 Psychiatrists, child psychiatrists, clinical psychologists 	Number, per 100,000 population	• Same	Mental health project
Income of doctors etc.	Yearly gross income	Same	Manpower project: no priority
Unemployment rate of doctors etc.	Unemployment/employment	Labour market statistics	Manpower project: no priority
Shortage of medical	•	•	 ECHI suggestion; bottelnecks in

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
personnel ??			available medical personnel are an indicator of health care quality (4.5)
4.2.3 Education			
No. physicians graduated	 WHO-HFA: Number, per 100,000 population, per year By gender, age 		•
Number of nurses and midwives graduated	Same		Same
No. pharmacists graduated	Same		Same
No. dentists graduated	Same		Same
4.2.4 Technology; diffusion of ne	ew technology is also a measure of health system perfroma	ance; indicators to be selected	
Radiation equipment	No. of units		Eurochip project; Eurostat/OECD
CT scans; UW-0	No. of units		OECD
MRI units; UW-0	No. of units		OECD
PET units	Positron emission tomography; No. of units		•
linear accelerators	Units with at least 2 linear accelerators		OECD
Lithotriptors	No. of units		OECD
haemodialysis stations	No. of units		OECD
Mammographs	No. of units		OECD
Discharges are taken as the best	n this section, WHO/HFA has been followed (except admis indicator for diseasae-specific hospital use, from the popu lated codes, to comply with the health status indicators. Il data by region		
Beddays: in-patient care	Beddays per 100,000 population	Registers	•
Beddays: acute care	Beddays per 100,000 population; selected diagnoses		Check Hospital Data Project (HDP); coordinate with diagniostic groups in 2.2. and 2.3, so preferably by ICD.
Beddays acute care circulatory diseases	aggregate beddays per year for AMI, acute coronary syndromes, stroke		Eurociss project:
Occupancy rate: in-patient			•

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
care			
Occupancy rate: acute care			•
Average length of stay: in- patient care	Average length of stay in days		•
 Average length of stay acute care for selected diagnoses; UW-0 	Average length of stay in days		Coordinate with diagniostic groups in 2.2. and 2.3, so preferably by ICD.
Average length of stay acute care for circulatory diseases	 Average length of stay in days, for AMI, acute coronary syndromes, other forms of heart disease, stroke 		Eurociss project:
Long-stay psychatric patients	 Number of in-patients staying > 300 days in psychiatric services; WHO-HFA: no of in-patients staying over 1 year in psychiatric services 		Mental health project
Discharges; total	 Number of discharges, per 100,000; If by gender/age: standardise 		
 Discharges; by disease group; UW-0 	 Number of discharges, per 100,000; If by gender/age: standardise WHO-HFA: discharges per 100 000 for infectious/parasitic disease, cancers, mental/behavioral, circulatory system, respiratory system, digestive system, musculoskeletal system, injuries/poisoning 		coordinate with diagniostic groups in 2.2. and 2.3, so preferably by ICD.
Discharges for circulatory diseases	 For AMI, acute coronary syndromes, all ischaemic heart disease, heart failure, other forms of heart disease, stroke 		Eurociss project
Hospitalisations in psychiatric sevices	 full-time + part-time hospitalisations in psychiatric services; separate under age 18 		Mental health project
Maternity units: distribution of place of birth; UW-9	Place of birth: at home, maternity units		Peristat
Maternity units: % very	•		Peristat

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
preterm births in units without NICU; UW-9			
4.3.2 Out-patient care utilisation			
General practitioner contacts; UW-0	Number, per 100,000/year	Survey (register)	HIS project
Dentist contacts	•	•	HIS project
Physiotherapist contacts	•	•	HIS project
Alternative practice contacts	•	•	HIS project
Maternal/child care	•	•	HIS project
Births attended by midwives	•	•	Peristat?
Mental health care	•	•	 Mental health project: public and total (public private) psychiatric outpatient care; seeing health professional; sought other advice; afdmitted to psychiatric hospital; HIS project: also drug problem treatment
	rocedures; selection below is limited subset from C ance of health care; make here new arrangement • Number per 100,000 population		New in OECD 2001; invasive surgery public + private; excludes accident emergency surgery and endoscopies
Total surgical daycases	Number per 100,000 population		New in OECD 2001; invasive surgery public + private; excludes accident emergency surgery and endoscopies
CABG (Coronary Artery Bypass Grafting)	rate per 100,000 population	Hospital registries	Eurociss project additionally recommended: rate per event, by hospital discharges, acute versus elective, stent PTCA, pacemakers by population, CT, MRI scans for stroke, per population
 PTCA (Percutaneous Transluminal Coronary Angioplasty); UW-0 	rate per 100,000 population	Hospital registries	

	Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?		Source type, availability	H	IMP projects, other sources; remarks
•	Heart transplants		•	Hospital registries		
•	Other cardiovascular operations	Valvular operations, aortic/other aneurysma operations, pacemaker operations	•	Hospital registries		
•	Hip replacement; UW-0, UW- 6		•	Hospital registries	•	MSC project
•	Knee replacement; UW-6		•	Hospital registries	•	MSC project
٠	Cataract operation; UW-0	•	•		•	
•	Laser treatment in diabetics retinopathy; UW-3	 % patients receiving laser treatment < 3 months after diagnosis 	•	Patient number; reimbursement	•	EUDIP project
•	Renal replacement in diabetics; UW-3	 Annual incidence and prevalence of dialysis and transplantation/1 million general population 	•	Registry, patient number, reimbursement	•	EUDIP project
•	Cancer palliative radiotherapy	•	•		•	Eurochip
•	Hysterectomy; UW-11	% of women with hysterectomy at age 50	•	Population survey, hospital data	•	Reprostat
•	Births by delivery mode; UW-9	 Distribution of births by mode of delivery: % spontaneous, assisted (ventouse, forceps), Caesarean before labour onset, Caesarean during labour; WHO-HFA: Caesarean sections per 1000 live births 	•	Birth registers, perinatal surveys	•	Peristat project: by presentation of fetus, parity, previous Caesarean, plurality; indicator of medicalisation of childbirth (also 4.5.2, quality indicator?)
٠	Onset of labour	Distribution of births by mode of onset of labour	٠		٠	Peristat
٠	Episiotomy	% vaginal births with episiotomy	•		•	
٠	Fertility treatment; UW-9	% pregnancies following fertility treatment	٠		•	Peristat
•	Births without medical intervention; UW-9 Births attended by midwise; UW-9	•	•		•	Peristat
•	Others?				•	Possibly: new mini-invasive surgeries/endoscopies; transplantations; also certain low-tech revalidation technologies; only effective procedures to select
•	Cancer treatment modes	 Patients treated by surgery, chemotherapy, radiotherapy, endocrine therapy (ECHI: useful 	•	Cancer registry	•	Eurochip project

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
	without ref. To cancer type?) , bone marrow transplants		
4.3.4 Medicine use/medical aids?			
Medicine use total	• Destinutes dans		 Eurostat: average number of packages/prescriptions/person; His project: number of people using prescr/non-prescr drugs Euro-med-stat: see below; data by gender, age, region, SES
 Use of specific groups of medicines; UW-0 	 Peptic ulcer drugs Diabetes drugs Cholesterol/triglyceride reducers Cardiac glycosides Anti-arrhythmics Antihypertensives Diuretics Beta blocking agents Systemic antibacterials Analgesics Benzodiazepine derivatives Psychoanaleptics Antiasthmatics 		 Selection from OECD Eurochip project: hormonal replacement therapy (surveys!) Euro-med-stat project (preliminary): for selected set of pharmaceuticals (not same as OECD list): Utilisation in DDD Itilisation in DDD/1000 population/day Expenditure per DDD Other expenditure indicators Eurociss project: Thrombolytic drugs (per AMI event) ACE-inhib, beta-blockers, diuretics, nitrates, aspirin, calcium antag., digitalis, spironolattone, statines, anticoagulants (rate/patient) Mental health project: DDD/1000/day for: Antidepressants Antipsychotics Anxiolytics Hypnotics

from WHO, OECD, Eurostat? By gender, age, region, SES?		HMP projects, other sources; remarks
		MSC project: include RA drugs (ATC L 04A)
	• HIS	
		Take items from Eucomp; Eurostat
		Take from WHO/HQ? Included in HIS project
alth; mainly from OECD 2001 core list according to SHA	·	
Total; PPP\$ per capita; % of GNP/GDP		
 Total; PPP\$ per capita; % of GNP/GDP 		
 Total; PPP\$ per capita; % of GNP/GDP 		
vices		
% of total expenditure		Mental health project: expenditures of in-patient + outpatient psychiatric services
% of total expenditure		
 % of total expenditure Public expenditure for cancer prevention on tobacco Public/private expenditure for cancer registration 		Eurochip project (cancer)
	ncing; in this section the core list of OECD is mostly used ises the question where to accomodate this type of inform alth; mainly from OECD 2001 core list according to SHA • Total; PPP\$ per capita; % of GNP/GDP • Mof total expenditure • % of total expenditure • % of total expenditure • % of total expenditure	HIS HIS ises the question the core list of OECD is mostly used. Note: the mental health project pro ises the question where to accomodate this type of information. Create a section here under ises the question where to accomodate this type of section are under ises the question where to accomodate this type of information. Create a section here under ises the question where to accomodate this type of information. Create a section here under ises the question where to accomodate this type of information. Create a section here under ises the question where to accomodate this type of information. Create a section here under ises the question where to accomodate this type of information. Create a section here under ises the question where to accomodate this type of information. Create a section here under ises the question where to accomodate this type of information. Create a section here under ises the question where to accomodate this type of information. Create a section here under ises the question where to accomodate this type of information. Create a section here under ises the question where to accomodate this type of information. Create a section here under ises the question where to accomodate this type of information. Create a section here under is the question where to accomodate this type of information. Create a section here under work the type of t

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
	 Public/private expenditure for cancer screening Public/private expenditure for cancer research Public/private expenditure on cancer drugs 		
 Expenditure on home care services (total/public/private) 	% of total expenditure		
4.4.4 Medical goods dispensed to	o out—patients		
 Expenditure on pharmaceutical goods and other medical non-durables 	% of total expenditure; PPP\$ per capita		
Expenditure on medical appliances/other durables	% of total expenditure; PPP\$ per capita		
4.4.5 Total health expenditure by list	age group (expenditure by disease not yet proposed for t	echnical reasons); may be problem	in some countries; dropped from OECD 2001
Expenditure by age group	 Expenditure (%) 0-64 (m/f) Expenditure (%) 65-74 (m/f) Expenditure (%) 75+ (m/f) 	Calculated from several sources	
 Expenditures for cancer prevention, registries, drugs, research 	•	•	Eurochip
• cost of a cancer patient	•	•	Eurochip
4.4.6 Health expenditure by fund	source; follow SHA	1	
 By government/social security/own pocket etc. Financial equity/accesibility of care 			Indicator of health system performance; place here or in 4.4.1?

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
system, quality and performance de effective in promoting health (see b specific medical procedures (4.3.3)	rmance; this is a special section. Whereas sections 4.2-4 eal with whether the system does what we want it do do. T elow in 4.5.1-4.5.3). In fact selected indicators from earlie , or on financial equity of access (4.4) could find a place in rs of the quality/performance of health systems, including alth system (A list).	The yardstick is thus whether it is pati r sections like on medical manpower n this section as well. Together with tl	ent-oriented, safe, and last but not least (4.2.2), on up-to-date technology (4.2.4), on his section, many of the indicators under 4.1
4.5.1 Subjective indicators; thie	group includes indicators on patient-orientedness		
Satisfaction with the health system	% of population satisfied with health system		•
Responsiveness; UW-0??			WHO instrument?
 Satisfaction of mothers with perinatal care; UW-9 	•		Peristat: for development
clearly associated with ad	ators; this group includes indicators of medical safety as w verse or improved health outcomes from research informa		ess measures. Selected items should be
 Autopsy rate Waiting lists/times; UW-0 	 % of deaths In-hospital waiting time for femur fracture surgery; Waiting time for elective surgeries e.g. cataract, 	•	OECD pilot indicators; OECD study on waiting times
Compliance with oncology practice	 hip replacements, PTCA Deviance to best oncology practice (definition: % of treatments given with specific bad practice) 	Cancer registry	Eurochip
 Inappropriate diabetes monitoring; UW-3 	 Proportion of diabetics with HbA1c < 6.5% 	•	OECD pilot indicators; see also 4.1.1
28-day emergency readmission rate			In UK for specific diseases
 Quality of blood products; amount of blood transfused 			Health care quality indicator?
Accessibility of care facilities	 Does health policy give access to immunisation and other care for children who are asylum seekers, illegal, homeless, itinerant 	 Policy assessment 	Child project (ECHI why not assess actual situation?)
 Parental accompaniment in hospitals 	% of children inpatient beds (under 16) where parents can stay day and night	 Hospital discharge data (feasible??) 	Child project (ECHI: relevant indicator?)

Indicator and group; In user-window (UW)?	Operational definition; from WHO, OECD, Eurostat? By gender, age, region, SES?	Source type, availability	HMP projects, other sources; remarks
Delay of cancer treatment	Defined by specific sites	Cancer registry	Eurochip project
 Support to women in perinatal period; UW-9 	•	•	Peristat: for development
4.5.3 Health outcomes; this grou related to the use of up-to-	up includes indicators of medical safety as well as effectiv -date medical procedures.	reness, in terms of measures health	outcomes. Selected items should be clearly
Avoidable Deaths	Asthma mortality rate age 5-40		 OECD Pilot indicators Earlier studies: perinatal & maternal deaths
 latrogenic disease/death 			Define criteria
 30-day mortality rate following acute AMI 			OECD pilot indicators
 30-day mortality rate following stroke 			OECD pilot indicators
30-day mortality after CABG			OECD pilot indicators
 Surgical wound infection; UW-0 	Incidence		Helics project?
 Incidence of end-stage renal failure per 1000 diabetics; UW-0, UW-3 	Blindness and nephropathy from diabetes: see 2.3.3		Eudip projectOECD pilot indicators
Antibiotic Resistance	Number per population		Based on laboratory tests; EARSS project; focus on Streptococcus pneumoniae and Staphylococcus aureus
 Cancer survival rates; UW-0 	 5y survival rate acute lymphatic leukemia in children 5y survival rate breast, cervical, colorectal cancer 	Cancer registries	 Child project: 5y age groups up to 19 (at diagnosis) OECD pilot indicators: observed and relative survival Recommendations from IARC follow
 Stage at cancer diagnosis; UW-0 	•	•	Eurochip
Coverage of cancer registration	•	•	Eurochip project (ECHI: indicator on quality of information)

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