

June 30, 2003

SELECTION OF A SET OF 'CORE INDICATORS' FROM THE ECHI-2 COMPREHENSIVE INDICATOR LIST OF MAY 16, 2003

**Exclusive presentation of selected indicators
with all section headings retained**

(ECHI-2 = European Community Health Indicators project, 2nd phase)

- Process:
- * Draw-up of comprehensive indicator list by ECHI-2, based on results of ECHI-1 and all recently available HMP results.
 - * Selection of 50 first choice and 50 second choice indicators (out of 400) by a panel of 19 public health generalists, mostly the ECHI-2 team.
 - * After addition, the scores shown in the column 'original panel selection' were calculated as 2* first choice plus 1* second choice score.
 - * The results were discussed in the meeting of the ECHI-2 team of June 19-20, 2003.
 - * It was proposed to include all indicators receiving 15 points or more as the basis for the core list (leaving 46 indicators).
 - * Some additions and deletions were proposed by the ECHI-2 team, leading to the selection as given by grey shade on the indicator names
 - * After the ECHI meeting, indicators from the chapters 1, 3 and 4, given 12 points or more were marked in the list as optional additions, to compensate for the dominance of mortality/morbidity indicators from chapter 2 (lighter shading)
 - * **Follow-up: in the next phase, operational definitions and data availability have to be checked with Eurostat core groups and HMP projects**
- General:
- * Indicators are mostly worded as an item, not as operational definition
 - * Sometimes this implies a reference to a data source from which many indicators can theoretically be calculated (e.g. mortality data, hospital data). These issues count as one choice
 - * **in general, the obvious need to stratify by gender, age (children, elderly), region, SES, is left implicit**
- Details:
- * see: 'Selection of a first phase set of core indicators from the comprehensive ECHI indicator list; rationale and procedures'

Selection of June 19-20: shaded

Possible additions from socio-economic, determinants and health systems (chapters 1, 3 and 4) on the basis of cut-off at 11-12 points: lighter shading

**This column: Original panel score; selection
on basis of >14 shaded
XX**

**This column: Amended by ECHI meeting;
with considerations:
XX**

**Eurostat's
preliminary
assessment of
availability**

yes: available
?: not clear yet
n.a.: not assessed

CLASS 1 DEMO-GRAPHIC AND SOCIO-ECONOMIC FACTORS

1.1 Population

For section 1.1: no need to include background indicators in core set; they are available anyway.

- * mother's age distribution
- * induced abortions

14
14

yes
?

1.2	<i>Socio-economic factors</i>		<i>For section 1.2: see remark under 1.1; still, some indicators that are considered sufficiently strong (distal) determinants of health are retained.</i>	yes
	* population by 4 ISCED education classes	25		
	* total employment rate 15-64/total unemployment	16/17	<i>Choose one relevant indicator of (un)employment</i>	yes
	* % population with income below 60% national median (Eurostat def.)	15		?

CLASS 2 HEALTH STATUS

2.1	<i>Mortality general</i>		<i>General observation: panel selection conservative, based on the medical model; some changes suggested to improve this</i>	
	* Life expectancy at various ages	36		yes
	* infant mortality (birth -> 1 year)	30	<i>check with Peristat project: best choice in the area? alternative: neonatal+fetal death by birthweight etc?</i>	yes
2.2	<i>Cause-specific mortality</i>			
	* standardised death rate Eurostat 65 causes, age 0-65	26	<i>For the 65 causes, all data are there; those causes selected that appear in the morbidity section.</i>	yes
	* standardised death rate Eurostat 65 causes, age 65+	20		yes
	AIDS			
	all cancers			
	lung etc. cancer			
	breast cancer			
	prostate cancer			
	diabetes			
	ischaemic heart disease			
	stroke			
	COPD			
	rheumatoid arthritis			
	preinatal conditions			
	transport accidents			
	suicide			
	* smoking-related deaths	15	<i>These two items included both to emphasise prevention approach.</i>	n.a.
	* alcohol-related deaths	14		n.a.
2.3	<i>Morbidity disease-specific</i> <i>generally incidence and/or prevalence; for different diseases data come from different sources.</i>		<i>General observation: too little on non-fatal diseases and mental health; several proposals to improve this.</i>	

	* HIV/AIDS	26		?
	* all cancers	24		yes
	* lung etc cancer	19		yes
	* breast cancer	21		yes
	* prostate cancer	15		yes
	* diabetes all types prevalence	18		?
	* Dementia/Alzheimer	16		?
	* Depression	14	Added for mental health priority	?
	* suicide attempt	6	Added for mental health priority	n.a.
	* acute myocardial infarction (AMI)	23		?
	* stroke	24		?
	* COPD	15		?
	* Musculoskeletal system indicator rheumatoid arthritis, osteoarthritis	10, 4	Check HMP project which is best choice to add as non-fatal cause of morbidity.	n.a.
	* (low) birth weight	23	Peristat project: combine with (pre)term births	yes
	* road traffic injuries	17		yes
2.4	Perceived and functional health		The ECHI team noted a scarceness of indicators in this group compared to 2.3. Additions are made.	
	* self-reported health	29		yes
	* Prevalence of any chronic illness or condition	21		yes
	* Limitations in seeing, hearing, mobility, speaking, biting, agility	10	Included since this is basically the classical disability.	n.a.
	* limitations of usual activities, past 6 months, health related	9	Included since this is included in SILC questionnaire	n.a.
2.5	Composite measures of health status			
	* Health expectancy based on: Limitations in seeing, hearing, mobility, speaking, biting, agility	12	Included: this is the most common health expectancy	n.a.
CLASS 3 DETERMINANTS OF HEALTH			The ECHI team noted a scarceness of indicators in this field except for the classical cardiovascular and cancer determinants; additions made	
3.1	Personal and biological factors			
	* body mass index	34		yes
	* blood pressure/hypertension	24		?
3.2	Health behaviours			
	* regular smokers	35		yes

	* pregnant women smoking	11	Added: importance for perinatal health	n.a.
	* alcohol: % of heavy drinkers, frequency of heavy drinking	22		?
	* total alcohol consumption	17		yes
	* use of illicit drugs (incl. Children)	12	Added: children and societal problem.	?
	* total energy uptake/person	14		?
	* % energy from fat	12		n.a.
	* intake of fruit excluding juice	13	These two added as core for the food intake item	?
	* intake of vegetables excl. potatoes and juice	14		?
	* physical activity (time spent, energy expenditure)	22		yes
	* contraceptive use (type, general, 1st intercourse)	13		?
	* breastfeeding at various ages	10	Added: public health issue of rising importance	n.a.
3.3	Living and working conditions		The ECHI team noted the absence of selected items in this group. To be filled later with future HMP results	
CLASS 4 HEALTH SYSTEMS				
4.1	Prevention, health protection and health promotion		Also in this section, there is too much emphasis on the classical issues; additions/deletions are made	
	* vaccination coverage in children	28		?
	* blood pressure measurement	12		?
	* antihypertensive drug treatment	13		n.a.
	* policies on healthy nutrition	6	These three issues added to implement	n.a.
	* campaigns on smoking, alcohol, diet, safe sex, drug use, sunlight exposure, physical activity, injury prevention	10	a more modern health promotion approach; even though these are development areas.	n.a.
	* integrated programmes in settings: e.g. schools, workplaces	3		n.a.
4.2	Health care resources		In sections 4.2-4.4 not much was selected. Many indicators here are less related to public health; the ECHI team was not very satisfied with the few selections made and could not come to a conclusion. It was agreed that selected indicators should have a clear-cut relation with health outcomes. This has to be worked out later.	
	* hospital beds total	12		yes
	* hospital beds acute care	14		yes
	* physicians employed	21	Check with manpower project whether this is	?
	* nurses employed	21	acceptable choice	?
4.3	Health care utilisation			

	* general practitioner utilisation	17		yes
	* utilisation of medicines and medical aids	12		n.a.
4.4	<i>Health expenditures/financing</i>			
	* total/public/private expenditures on health	26	check whether this is acceptable for SHA	yes
	* expenditures on in-patient care	14	(System of Health Accounts)	yes
	* expenditures on out-patient care	12		yes
	* expenditures on pharmaceuticals and other non-durables	13		yes
4.5	<i>Health care quality/performance</i>			
	* satisfaction with the health system	14		?
	* waiting lists	15	problem of operationalisation; link to surgeries?	?
	* cancer survival rates	17		yes

The total number resulting is:

Chapter 1: 3 (+2, with lower cut-off)
Chapter 2: 26 (with Eurostat causes of death counted as 2)
Chapter 3: 11 (+3, with lower cut-off)
Chapter 4: 10 (+9, with lower cut-off)

Total: 50 (+14, with lower cut-off)

The impression remains that the list is (too much) dominated by disease-specific items, whereas from a public health point of view one would expect more on determinants and public health actions.

For a follow-up it is necessary:

- * to assess availability and comparability of data; this will split the list into (1) quickly implementable and (2) development items.
- * to check specific indicator definitions and questions with the appropriate HMP projects (partly indicated).
- * to have further discussions on areas not adequately covered (other than classical disease-oriented, environmental indicators, health promotion indicators, health system performance indicators from the health systems chapter).

Finally, the big field of tension that remains is between, on the one hand, wanting a quick implementation with available material, necessarily on the basis of existing databases, and on the other hand fully exploiting the accomplishments of the HMP projects.

For the latter, follow-up actions outside the 'core-indicators-track' are obviously needed.

We might start a separate development track for this, to keep the momentum for innovation!!

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Placed in the context of the full ECHI list. (ECHI-2 = European Community Health Indicators project, 2nd phase)

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 * Selection of 50 first choice and 50 second choice indicators (out of 400) by a panel of 19 public health generalists, mostly the ECHI-2 team.
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 * Follow-up: in the next phase, operational definitions and data availability have to be checked with Eurostat core groups and HMP projects.

General: * Indicators are mostly worded as an item, not as operational definition
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 * in general, the obvious need to stratify by gender, age (children, elderly), region, SES, is left implicit

Details: * see: 'Selection of a first phase set of core indicators from the comprehensive ECHI indicator list; rationale and procedures'

Selection of June 19-20: shaded		Original panel score and selection	
<i>Possible additions from socio-economic, determinants and health systems (chapters 1, 3 and 4) on the basis of cut-off at 11-12 points: lighter shading</i>		Amended by ECHI meeting; considerations.	
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		\	\
		\	\
		\	\
		\	\
CLASS 1	DEMO-GRAPHIC AND SOCIO-ECONOMIC FACTORS		
1.1	Population	\	For section 1.1: no need to include background indicators in core set; they are available anyway.
1.1.1	Population status	\	\
		\	\
*	Total population	16	deleted
*	Population by age	32	deleted
*	Population by region	7	
*	Population by urbanisation	3	
1.1.2	Population dynamics		
*	birth rate	20	deleted
*	fertility rate	21	deleted
*	mother's age distribution	14	
*	specified from above: teenage births	10	
*	specified from above: maternal age at 1st birth	10	
*	distribution of parity	2	
*	induced abortions	14	
*	death rate	11	
*	net migration	4	
*	annual population change	1	
*	population projections	16	deleted
1.2	Socio-economic factors		For section 1.2: see remark under 1.1; still, some indicators that are considered sufficiently strong (distal) determinants of health are retained.
1.2.1	Household situation		
*	population by household type	15	deleted
*	% children in single-parent household	6	
1.2.2	population by ethnicity		
*	population by ethnic origin/citizenship	11	
*	mothers by country of origin	0	
*	% children seeking asylum	0	
1.2.3	education		
*	population by 4 ISCED classes: elementary, lower sec., upper sec., tertiary	25	
*	% of 18-24 not in education and with low qualifications	4	
*	% children with 'current' mother in each of 4 ISCED classes	0	
*	% mothers delivering babies in each of 4 ISCED classes	4	
*	education enrolment, % in each of 4 ISCED classes	1	
*	literacy rate	11	
*	early school leavers	7	
*	pre-primary education ages 3-5	4	
1.2.4	employment		
*	population by ISCO 2-digit employment type	8	
*	population by current or last occupation in 6 ISCO groups	13	
	(upper non-manual, lower non-manual, skilled manual, unskilled manual, self-employed, farmer)	0	
		0	

*	% children living in household of 6 ISCO classes (highest of father/mother)	2	
*	total labour force	5	
*	total employment rate 15-64	16	
*	total unemployment	17	choose one relevant indicator of (un)employment
1.2.5	income distribution		
*	gini co-efficient	13	
*	% population with income below 60% national median (Eurostat def.)	15	
*	% children living in household as above	6	
*	80/20 share ration of total income by quintile	0	
1.2.6	general economics		
*	GDP	8	
*	GDP PPP(purchasing power parity)	15	deleted
CLASS 2 HEALTH STATUS			General observation: panel selection conservative, based on the medical model; some changes suggested to improve this
2.1	Mortality general		
2.1.1	Life expectancy and related		
*	Life expectancy at various ages (or chance of dying in age intervals)	36	
2.1.2	Death rates		
*	crude death rate	3	
*	crude death rate, age intervals	8	
*	standardised death rate	23	deleted; not useful besides life expectancies
*	infant mortality (birth -> 1 year)	30	check with Peristat project: best choice in the area?
*	neonatal mortality (birth -> 28 days)	13	alternative: neonatal+fetal death by birthweight etc?
*	postneonatal mortality (28 days -> 1 year)	6	
*	perinatal mortality (stillbirths + birth -> 1 week)	12	
*	causes of perinatal mortality	2	
*	fetal mortality	6	
*	inequality in deaths	5	
2.2	Cause-specific mortality		For section 2.2: all data are there; select those causes that appear in the morbidity section.
	below issues as one indicator for all 65 causes selected by Eurostat since these are from one database		
*	numbers of deaths	10	
*	crude death rate	11	
*	standardised death rate 0-65	26	
*	standardised death rate 65+	20	
*	potential years of life lost (PYLL)	13	
*	PYLL fraction	5	
	Eurostat 65 causes: all ICD chapters plus major subdivisions: Infectious; tuberculosis, meningitis, AIDS, viral hepatitis Neoplasms; lip/oral/pharynx, oesophagus, stomach, colon, anorectal, liver+, pancreas, lung+, melanoma, breast, cervix, other uterus, ovary, prostate, kidney, bladder, haematopoietic tissue Blood, immunological disorders Endocrine; diabetes Mental; alcohol abuse, drug dependence Nervous/sense; meningitis Circulatory; ischaemic heart disease, other heart disease, stroke Respiratory; influenza, pneumonia, COPD, asthma Digestive; ulcer of stomach+, chronic liver Skin Musculoskeletal; rheumatoid arthritis, osteoarthritis Genitourinary; kidney and urether Pregnancy, childbirth Perinatal conditions Congenital malformations; nervous, circulatory Symptoms, ill-defined causes, sudden infant deaths, unknowns External causes; transport, falls, poisoning, suicide, homicide, unknown		
	causes below were indicated by HMP projects, to be selected separately		
*	*diabetes primary & other causes	6	
*	*young age bands for infectious, perinatal, congenital, some injuries	0	
*	*extra cancer sites from 23 of Eucan: gallbladder, testis, brain/CNS, mesothelioma, thyroid, childhood cancers, lymphoma, multiple myeloma, leukemia (last three lumped in Eurostat 65)	1	
*	*extra causes from Eurociss project: AMI (ICD-9: 410), acute coronary syndromes (410-411) heart failure (428) other forms of heart disease and stroke	2	
		2	
		0	
		0	

*	*maternal mortality, also by cause of death	7	
*	*smoking-related deaths	15	These two items included both to emphasise prevention approach.
*	*alcohol-related deaths	14	
*	*fatal accidents at work	12	
*	*drug-related deaths	11	
2.3	Morbidity disease-specific generally incidence and/or prevalence; for different diseases data come from different sources.		General observation: too little on non-fatal diseases and mental health; several proposals to improve this.
2.3.1	infectious/parasitic		
*	HIV/AIDS	26	
*	HIV seroprevalence in pregnant women	9	
*	STD, specif. Chlamydia	10	
*	tuberculosis	13	
*	measles	5	
*	meningitis	8	
*	hepatitis B	13	
*	vaccination scheme diseases	10	
2.3.2	neoplasms		
*	all cancers	24	
*	mouth/pharynx/larynx	2	
*	oesophagus	3	
*	stomach	8	
*	colorectal	13	
*	liver	3	
*	gallbladder/biliary tr.	2	
*	pancreas	2	
*	lung etc	19	
*	melanoma	11	
*	breast	21	
*	cervix	13	
*	endometrium	4	
*	ovary	3	
*	prostate	15	
*	testis	2	
*	bladder	2	
*	kidney	2	
*	brain/CNS	2	
*	thyroid	3	
*	lymphomas	5	
*	multiple myeloma	2	
*	leukemia	6	
*	childhood cancers	6	
*	mesothelioma	2	
*	Kaposi	2	
2.3.4	Endocrine		
*	diabetes type 1 incidence in children	9	
*	diabetes all types prevalence	18	
*	proportion of blindness incidence due to diabetes	3	
*	retinopathy and nephropathy B544linked to diabetes	2	
2.3.5	Mental/behavioral		
*	Dementia/Alzheimer	16	
*	Depression	14	Added for mental health priority
*	Generalised anxiety disorder	6	
*	post-partum depression	4	
*	Alcohol-related disorders	5	
*	suicide attempt	6	Added for mental health priority
2.3.6	Nervous system/senses		
*	cataract	4	
*	migraine/frequent headache	0	
2.3.7	Circulatory system		
*	acute myocardial infarction (AMI)	23	
*	acute coronary syndromes	4	
*	heart failure	5	
*	other heart disease	3	
*	stroke	24	
*	prevalence of effort angina	5	
*	AMI case fatality	9	
*	stroke case fatality	6	
2.3.8	Respiratory system		
*	COPD	15	
*	childhood asthma	9	
*	general and allergic asthma	5	
2.3.9	Digestive system		
*	Decayed etc. teeth: mean DMF-12 index	13	
*	prevalence of gastric or duodenal ulcer	2	
*	water-foodborne diseases	2	

2.3.11	Musculoskeletal system			
*	rheumatoid arthritis (incidence, prevalence)	10		<i>Check HMP project which is best choice to add as non-fatal cause of morbidity.</i>
*	osteoarthritis (prevalence)	4		
2.3.12	Genitourinary system			
*	urinary incontinence in women	5		
*	erectile dysfunction	3		
2.3.13	Pregnancy/childbirth			
*	problems in getting pregnant	6		
*	deliveries with assisted reproductive technology	5		
*	severe maternal morbidity (composite measure)	0		
*	trauma to perineum	0		
*	fecal incontinence chronic	0		
2.3.14	Perinatal conditions			
*	(low) birth weight	23		<i>Peristat project: combine with (pre)term births</i>
*	gestational age distribution (pre-term births)	9		
*	APGAR score	1		
*	prevalence of cerebral palsy	3		
*	prevalence of hypoxic-ischemic encephalopathy	2		
2.3.15	Congenital malformations			
*	Down's syndrome	7		
*	neural tube defects	6		
2.3.17	External causes			
*	road traffic injuries	17		
*	occupational injuries	13		
*	home/leisure injuries	10		
*	burns, in children	2		
*	poisoning, in children	2		
*	hip fracture incidence	13		
*	long-bone fractures, in children	0		
*	alcohol-related traffic accidents	7		
2.3.18	Certain avoidable causes			
*	occupational injuries	9		
*	occupational diseases	8		
*	Creutzfeld-jacob disease	8		
2.4	Perceived and functional health			<i>The ECHI team noted a scarceness of indicators in this group compared to 2.3. Additions are made.</i>
2.4.1	Perceived health			
*	self-reported health	29		
*	self-reported musculoskeletal pain	3		
*	self-reported sexual health	2		
2.4.2	Chronic disease general			
*	Prevalence of any chronic illness or condition	21		
2.4.3	Functional limitations			
*	Limitations in seeing, hearing, mobility, speaking, biting, agility	10		<i>Included since this is basically the classical disability.</i>
*	Cognitive limitations in memory, learning, literacy, attention	7		
2.4.4	Activity limitations			
*	limitations of usual activities, past 6 months, health related	9		<i>Included since this is included in SILC questionnaire</i>
*	limitations in personal care (feeding, dressing, toilet, washing, etc.)	9		
*	limitations in household activities (shopping, cooking, laundry, finances, etc.)	4		
*	limitations in school, work, leisure, social activities	3		
*	limitations of activities due to circulatory disease	2		
2.4.5	Short-term activity restrictions			
*	temporary limitations by health problem, past 2 weeks	2		
2.4.6	General mental health			
*	psychological distress	2		
*	psychological well-being	1		
*	happiness	1		
*	role limitations by emotional problem	3		
2.4.7	General quality of life			
*	Euroqol instrument	6		
*	Euroqol for circulatory disease patients	0		
2.4.8	Absenteeism from work etc.			
*	Absenteeism from work	3		
*	disability pensions	3		
2.5	Composite measures of health status			
	Health expectancy based on:			
*	self-reported health	14		
*	Prevalence of any chronic illness or condition	7		

*	Limitations in seeing, hearing, mobility, speaking, biting, agility	12	Included: this is the most common health expectancy
*	Cognitive limitations in memory, learning, literacy, attention	2	
*	Limitations of usual activities, past 6 months	3	
*	limitations in personal care (feeding, dressing, toilet, washing, etc.)	4	
*	limitations in household activities (shopping, cooking, laundry, finances, etc.)	2	
*	limitations in school, work, leisure, social activities	2	
*	temporary limitations by health problem, past 2 weeks	0	
*	psychological distress	0	
*	psychological well-being	0	
*	happiness	0	
*	role limitations by emotional problem	0	
*	Euroqol instrument	1	
CLASS 3 DETERMINANTS OF HEALTH			The ECHI team noted a scarceness of indicators in this field except for the classical cardiovascular and cancer determinants; additions made
3.1	Personal and biological factors		
3.1.1	Biological (risk) factors		
*	body mass index	34	
		0	
*	waist/hip circumference and ratio	4	
*	sagittal abdominal diameter	1	
*	blood pressure/hypertension	24	
*	total serum cholesterol	9	
*	cholesterol fractions and fatty acid cholesterol esters	7	
*	glucose tolerance	9	
*	nutritional status indicators: serum ferritin, transferrin receptors, retinol, carotenoids, folate, selenium, 25-hydroxy vitamin D3	3	
		0	
*	osteoporosis	4	
*	multiple births	3	
*	distribution of parity in births	0	
3.1.2	Personal conditions		
*	sense of mastery (coping ability)	3	
*	optimism (life orientation)	0	
*	knowledge of health risks (uv radiation, smoking, etc.)	2	
3.2	Health behaviours		
3.2.1	Substance use		
*	regular smokers	35	
*	former smokers	6	
*	never smokers	6	
*	amount smoked/person	10	
*	pregnant women smoking	11	Added: importance for perinatal health
*	occasional smokers; smoking frequency	2	
*	smokers among diabetics	0	
*	alcohol: non-drinkers	10	
*	alcohol: % of heavy drinkers, frequency of heavy drinking	22	
*	drinking in children	2	
*	total alcohol consumption	17	
*	% of alcohol consumed as toxicant/with meals	3	
*	use of illicit drugs (incl. Children)	12	Added: children and societal problem.
3.2.2	Nutrition		
*	total energy uptake/person	14	
*	% energy from fat	12	
*	% energy from saturated fatty acids	11	
*	% energy from protein	4	
*	typical diet content of mono- and poly-unsaturated fatty acids	5	
*	intake of bread/cereals	7	
*	intake of fruit excluding juice	13	These two added as core for the food intake item
*	intake of vegetables excl. potatoes and juice	14	
*	intake of fish	8	
*	intake of meat and meat products	6	
*	intake of non-starch polysaccharides	4	
*	intake of vitamin D, folate, carotenoids	1	
*	intake of iron, iodine, calcium	2	
*	contaminants in food	0	
3.2.3	Other health-related behaviours		
*	physical activity (time spent, energy expenditure)	22	
*	sexual behaviour (partners, frequency)	3	
*	sexual behaviour: sexual experience in age 15-24	3	
*	contraceptive use (type, general, 1st intercourse)	13	
*	breastfeeding at various ages	10	Added: public health issue of rising importance
*	exposure to UV	1	
*	traffic behaviour	2	
3.3	Living and working conditions		The ECHI team noted the absence of selected items in this group. To be filled with future HMP results
3.3.1	Physical environment		
*	PM10 exposure/emissions	6	
*	other outside air pollutants	0	
*	indoor tobacco smoke exposure (esp children)	3	

*	indoor radon exposure	5
*	housing space	4
*	environmental determinants of physical activity:	7
*	drinking water supply	3
*	sewage system connection	3
*	cumulative exposure to ionising radiation	2
*	noise exposure	8
3.3.2	Working conditions	
*	occupational exposure to carcinogenic chemicals	5
*	occupational exposure to noise, vibrations, other	4
*	tobacco smoke exposure at work site	4
*	inconvenient/health-damaging working positions	2
*	mental stress factors at work	4
3.3.3	Social and cultural environment	
*	social support	7
*	social isolation/participation	7
*	parental support for children	3
*	children in social care	6
*	life events	2
*	experience of violence	4
*	experience of sexual abuse and violence	2

CLASS 4 HEALTH SYSTEMS

4.1 Prevention, health protection and health promotion

Also in this section, there is too much emphasis on the classical issues; additions/deletions are made

4.1.1	Disease prevention	
*	vaccination coverage in children	28
*	influenza vaccination coverage	10
*	breast cancer screening	24
*	cervical cancer screening	20
*	colorectal cancer screening	12
*	blood pressure measurement	12
*	serum cholesterol measurement	9
*	antihypertensive drug treatment	13
*	lipid-lowering drug treatment	9
*	counsel+B499ling on smoking by health professionals	5
*	general preventive examination	4
*	prenatal screening	9
*	prenatal care attendance	11
*	neonatal screening	5
*	integrated children's health monitoring	2
*	HIV testing among pregnant women	5
*	hormone replacement therapy	3

Deleted; these cancers included in health status and survival indicators.

4.1.2	Health promotion	
*	policies on healthy nutrition	6
*	campaigns on smoking, alcohol, diet, safe sex, drug use, sunlight exposure, physical activity, injury prevention	10
*	awareness of elevated blood pressure, cholesterol	0
*	integrated programmes in settings: e.g. schools, workplaces	4
*	physical punishment of children	3
*	anti-bullying policies in schools	0
*	mental health promotion	0

The issues in this section added to implement a more modern health promotion approach; even though these are development areas.

4.1.3	Health protection	
*	regulations on public smoking	9
*	smoking advertisement restrictions	1
*	tobacco prices	6
*	regulations on alcohol and driving	1
*	regulations on seat belts, helmets	1
*	policies on healthy nutrition, e.g. food/drink fortification	4
*	regulations on food safety and quality	1
*	regulations on air/water quality	0
*	regulations on noise	0
*	regulations on lead exposure	0

4.2 Health care resources

In sections 4.2-4.4 not much was selected. Many indicators here are less related to public health; the ECHI team was not very satisfied with the few selections made and could not come to a conclusion. It was agreed that selected indicators should have a clear-cut relation with health outcomes. This has to be worked out later.

4.2.1	Facilities	
*	hospital beds total	12
*	hospital beds acute care	14
*	hospital beds psychiatric	8
*	beds nursing/elderly home care	5
*	stroke units	0
4.2.2	Manpower	
*	total health services employment	7
*	total hospital employment	6
*	employment in nursing and residential care	5
*	employment in ambulatory care	5
*	employment in sales and proving of medical goods	0
*	employment in public health programmes	0

*	employment in health administration and insurance	0	
*	hospital staff per bed	1	
*	hospital nurses staff per bed	1	
*	physicians employed	21	Check with manpower project whether this is acceptable choice
*	nurses employed	21	
*	midwives employed	8	
*	dentists employed	9	
*	pharmacists employed	10	
*	paramedical professions	2	
*	psychiatrists, psychologists	0	
*	incomes of doctors	0	
*	unemployment rate in medical personnel	1	
*	shortage of medical personnel	2	
4.2.3	Education		
*	physicians graduated	3	
*	nurses/midwives graduated	0	
*	pharmacists graduated	0	
*	dentists graduated	0	
4.2.4	Technology		
*	radiation equipment	2	
*	CT scans	7	
*	MRI units	6	
*	PETs (positron emission tomography)	0	
*	linear accelerators	0	
*	lithotriptors	0	
*	haemodialysis stations	4	
*	mammographs	4	
4.3	Health care utilisation		
4.3.1	In-patient care		
*	beddays in-patient care	10	
*	beddays acute care, selected diagnoses	9	
*	beddays acute care circulatory diseases	2	
*	occupancy rate in-patient	6	
*	occupancy rate acute	3	
*	average length of stay (ALOS) in-patient care	8	
*	ALOS acute care, selected diagnoses	10	
*	ALOS acute care circulatory diseases	0	
*	hospital discharges	6	
*	hospital discharges for selected diagnoses	10	
*	hospital; discharges for circulatory diseases	1	
*	maternity units: distribution of place of birth	1	
*	maternity units: percentage of very preterm births in units without NICU	1	
4.3.2	Out-patient care utilisation		
*	general practitioner	17	
*	dentist	7	
*	physiotherapist	2	
*	alternative practice	2	
*	maternal/child care	2	
*	births attended by midwives	2	
*	mental health care	7	
4.3.3	Surgical operations and procedures		
*	total procedures in-patients	10	
*	total procedures daycases	6	
*	CABG	9	
*	PTCA	8	
*	heart transplants	2	
*	other heart/circulatory operations	0	
*	hip replacement	11	
*	knee replacement	2	
*	cataract operations	7	
*	laser treatment in diabetics retinopathy	0	
*	renal replacement in diabetics	1	
*	cancer palliative radiotherapy	0	
*	hysterectomy	1	
*	births by mode of delivery: spontaneous, assisted, caesarean	10	
*	onset of labour	0	
*	percent vaginal births with episiotomy	0	
*	percent births following fertility treatment	3	
*	percent births without medical intervention	0	
4.3.4	Use of medicines and medical aids		
*	utilisation	12	
*	price of active ingredient	0	
*	cost per DDD	2	
4.4	Health expenditures/financing		
4.4.1	Health care system		
*	insurance coverage	4	

*	distribution of household expenditures on health	2	
4.4.2	National expenditures on health		
*	total/public/private expenditures on health	26	check whether this is acceptable for SHA
*	total/public/private expenditures on personal health	3	(System of Health Accounts)
*	total/public/private expenditures on collective health	2	
4.4.3	Expenditures on medical services		
*	expenditures on in-patient care	14	
*	expenditures on out-patient care	12	
*	expenditures on ancillary services	2	
*	expenditures on home care services	6	
4.4.4	Medical goods for out-patients		
*	expenditures on pharmaceuticals and other non-durables	13	
*	expenditures on medical appliances and other durables	3	
4.4.5	Health expenditures by age, diagnosis, etc.		
*	Health expenditures by age	8	
*	expenditures for cancer prevention, registries, drugs, research	0	
*	cost of a cancer patient	1	
4.4.6	Health expenditures by fund source		
*	Health expenditures by fund source	8	
4.5	Health care quality/performance		
4.5.1	subjective indicators		
*	satisfaction with the health system	14	
*	responsiveness of the health system	4	
*	satisfaction of mothers with perinatal care	0	
4.5.2	health care process indicators		
*	autopsy rate	5	
*	waiting lists	15	problem of operationalisation; link to specific operations in 4.3.3?
*	compliance with oncology practice	0	
*	inappropriate diabetes monitoring (HbA1c)	1	
*	28-day emergency readmission rate	5	
*	quality of blood products	2	
*	accessibility of care	7	
*	parental accompaniment in children's hospitals	0	
*	delay in cancer treatment	7	
*	support to women in perinatal period	0	
4.5.3	health outcome indicators		
*	avoidable deaths: asthma	3	
*	30-days mortality after AMI	8	
*	30-days mortality after stroke	7	
*	30-days mortality after CABG	3	
*	surgical wound infection	3	
*	nephropathy from diabetes	1	
*	antibiotic resistance	7	
*	cancer survival rates	17	
*	stage at cancer diagnosis	9	
*	population coverage by cancer registration	7	

The total number resulting is:

Chapter 1: 3 (+2, with lower cut-off)
Chapter 2: 26 (with Eurostat causes of death counted as 2)
Chapter 3: 11 (+3, with lower cut-off)
Chapter 4: 10 (+9, with lower cut-off)

Total: 50 (+14, with lower cut-off)

The impression remains that the list is (too much) dominated by disease-specific items, whereas from a public health point of view one would expect more on determinants and public health actions.

According to Eurostat's preliminary check, the great majority of initially selected indicators are readily available, although not always comparable; also, an assessment of precise operational definitions has not yet been made.

For a follow-up it is necessary:

- * to assess availability, comparability and indicator definitions; this will split the list into (1) quickly implementable and (2) development items.
- * to check specific questions with HMP projects (indicated).
- * to have further discussions on areas not adequately covered (other than classical disease-oriented, environmental indicators, health promotion indicators, health system performance indicators from the health systems chapter).

This proposed core list was purposely set out within the comprehensive ECHI-2 list version May 2003, in order to enable better understanding of the overall context

Finally, the big field of tension that remains is between, on the one hand, wanting a quick implementation with available material, necessarily on the basis of existing databases, and on the other hand fully exploiting the accomplishments of the HMP projects. For the latter, follow-up actions outside the 'core-indicators-track' are obviously needed. We might start a separate development track for this, to keep the momentum for innovation!!

CORE LIST INDICATORS

Ranking of first choice indicators only

ranking	1st choice
1 Life expectancy at various ages	18
2 body mass index	17
3 regular smokers	17
4 Population by age	15
5 infant mortality (birth -> 1 year)	14
6 vaccination coverage in children	14
7 standardised death rate 0-65	13
8 self-reported health	13
9 HIV/AIDS incidence	12
10 stroke incidence/attack rate	12
11 total/public/private expenditures on health	12
12 population by 4 ISCED classes: elementary, lower sec., upper sec., tertiary	11
13 standardised death rate	11
14 all cancers, incidence	11
15 acute myocardial infarction (AMI), incidence	11
16 breast cancer screening	11
17 (low) birth weight	10
18 blood pressure/hypertension	10
19 physical activity (time spent, energy expenditure)	10
20 physicians employed	10
21 nurses employed	10
22 fertility rate	9
23 standardised death rate 65+	9
24 breast cancer incidence	9
25 Prevalence of any chronic illness or condition	9
26 alcohol: % of heavy drinkers, frequency of heavy drinking	9
27 Total population	8
28 birth rate	8
29 population projections	8
30 lung cancer incidence	8
31 diabetes all types prevalence	8
32 cervical cancer screening	8
33 total unemployment	7
34 Dementia/Alzheimer	7
35 total alcohol consumption	7
36 general practitioner visits	7
37 cancer survival rates	7
38 mother's age distribution	6
39 population by household type	6
40 population by current or last occupation in 6 ICO groups	6
41 total employment rate 15-64	6
42 gini co-efficient	6
43 % population with income below 60% national median (Eurostat def.)	6
44 GDP PPP(purchasing power parity)	6
45 potential years of life lost (PYLL)	6
46 prostate cancer incidence	6
47 Depression prevalence etc	6
48 COPD prevalence	6
49 road traffic injuries	6
50 self-reported health	6
51 total energy uptake/person	6

ranking	1st choice
52 intake of fruit excluding juice	6
53 intake of vegetables excl. potatoes and juice	6
54 hospital beds total	6
55 hospital beds acute care	6
56 expenditures on in-patient care	6
57 expenditures on pharmaceuticals and other non-durables	6
58 specified from above: teenage births	5
59 induced abortions	5
60 death rate (all causes)	5
61 perinatal mortality (stillbirths + birth -> 1 week)	5
62 numbers of deaths, Eurostat 65 causes	5
63 crude death rate, Eurostat 65 causes	5
64 *smoking-related deaths	5
65 *alcohol-related deaths	5
66 tuberculosis incidence	5
67 hepatitis B incidence	5
68 colorectal cancer incidence	5
69 cervix cancer incidence	5
70 occupational injuries	5
71 hip fracture incidence	5
72 use of illicit drugs (incl. Children)	5
73 colorectal cancer screening	5
74 blood pressure measurement	5
75 prenatal care attendance	5
76 beddays in-patient care	5
77 utilisation of medicines and medical aids	5
78 expenditures on out-patient care	5
79 waiting lists	5
80 specified from above: maternal age at 1st birth	4
81 population by ethnic origin/citizenship	4
82 neonatal mortality (birth -> 28 days)	4
83 fatal accidents at work	4
84 STD, specif. Chlamydia, incidence	4
85 vaccination scheme diseases	4
86 Decayed etc. teeth: mean DMF-12 index	4
87 rheumatoid arthritis (incidence, prevalence)	4
88 occupational injuries	4
89 limitations of usual activities, past 6 months, health related	4
90 Limitations in seeing, hearing, mobility, speaking, biting, agility	4
91 alcohol: non-drinkers	4
92 % energy from saturated fatty acids	4
93 contraceptive use (type, general, 1st intercourse)	4
94 serum cholesterol measurement	4
95 antihypertensive drug treatment	4
96 prenatal screening	4
97 campaigns on smoking, alcohol, diet, safe sex, drug use, sunlight expo	4
98 dentists employed	4
99 pharmacists employed	4
100 average length of stay (ALOS) in-patient care	4
101 total procedures in-patients	4
102 hip replacement	4
103 satisfaction with the health system	4
104 literacy rate	3
105 early school leavers	3
106 population by ISCO 2-digit employment type	3

ranking	1st choice
107 GDP	3
108 crude death rate, age intervals	3
109 fetal mortality	3
110 *diabetes primary & other causes	3
111 *drug-related deaths	3
112 HIV seroprevalence in pregnant women	3
113 melanoma	3
114 diabetes type 1 incidence in children	3
115 AMI case fatality	3
116 childhood asthma	3
117 home/leisure injuries	3
118 occupational diseases	3
119 Creutzfeld-jacob disease	3
120 Limitations in seeing, hearing, mobility, speaking, biting, agility	3
121 limitations in personal care (feeding, dressing, toilet, washing, etc.)	3
122 Prevalence of any chronic illness or condition	3
123 amount smoked/person	3
124 pregnant women smoking	3
125 % energy from fat	3
126 intake of bread/cereals	3
127 intake of fish	3
128 breastfeeding at various ages	3
129 environmental determinants of physical activity:	3
130 social isolation/participation	3
131 influenza vaccination coverage	3
132 policies on healthy nutrition	3
133 midwives employed	3
134 CT scans	3
135 MRI units	3
136 beddays acute care, selected diagnoses	3
137 occupancy rate in-patient	3
138 ALOS acute care, selected diagnoses	3
139 hospital discharges	3
140 hospital discharges for selected diagnoses	3
141 dentist	3
142 mental health care	3
143 total procedures daycases	3
144 CABG	3
145 births by mode of delivery: spontaneous, assisted, caesarean	3
146 expenditures on home care services	3
147 Health expenditures by age	3
148 Health expenditures by fund source	3
149 accessibility of care	3
150 delay in cancer treatment	3
151 Population by region	2
152 % children in single-parent household	2
153 % of 18-24 not in education and with low qualifications	2
154 total labour force	2
155 % children living in household as above	2
156 postneonatal mortality (28 days -> 1 year)	2
157 *maternal mortality, also by cause of death	2
158 measles	2
159 meningitis	2
160 stomach	2
161 lymphomas	2

CORE LIST INDICATORS**Ranking of indicators 1st and 2nd choice combined**

ranking	(2x1st+2nd)
1 Life expectancy at various ages	36
2 regular smokers	35
3 body mass index	34
4 Population by age	32
5 infant mortality (birth -> 1 year)	30
6 self-reported health	29
7 vaccination coverage in children	28
8 standardised death rate 0-65	26
9 HIV/AIDS incidence	26
10 total/public/private expenditures on health	26
11 population by 4 ISCED classes: elementary, lower sec., upper sec., tertiary	25
12 stroke incidence, attack rate	24
13 all cancers incidence	24
14 breast cancer screening	24
15 blood pressure/hypertension	24
16 standardised death rate all causes	23
17 acute myocardial infarction (AMI) incidence	23
18 (low) birth weight	23
19 physical activity (time spent, energy expenditure)	22
20 alcohol: % of heavy drinkers, frequency of heavy drinking	22
21 physicians employed	21
22 nurses employed	21
23 fertility rate	21
24 breast cancer incidence	21
25 Prevalence of any chronic illness or condition	21
26 standardised death rate 65+	20
27 birth rate	20
28 cervical cancer screening	20
29 lung cancer incidence	19
30 diabetes all types prevalence	18
31 total unemployment	17
32 total alcohol consumption	17
33 general practitioner visits	17
34 cancer survival rates	17
35 road traffic injuries	17
36 Total population	16
37 population projections	16
38 Dementia/Alzheimer prevalence	16
39 total employment rate 15-64	16
40 population by household type	15
41 % population with income below 60% national median (Eurostat def.)	15
42 GDP PPP(purchasing power parity)	15
43 prostate cancer incidence	15
44 COPD prevalence	15
45 smoking-related deaths	15
46 waiting lists	15
47 mother's age distribution	14
48 Depression incidence/prevalence	14
49 self-reported health	14
50 total energy uptake/person	14
51 intake of vegetables excl. potatoes and juice	14

ranking	(2x1st+2nd)
52 hospital beds acute care	14
53 expenditures on in-patient care	14
54 induced abortions	14
55 alcohol-related deaths	14
56 satisfaction with the health system	14
57 population by current or last occupation in 6 ICO groups	13
58 gini co-efficient	13
59 potential years of life lost (PYLL)	13
60 intake of fruit excluding juice	13
61 expenditures on pharmaceuticals and other non-durables	13
62 tuberculosis incidence	13
63 hepatitis B incidence	13
64 colorectal cancer incidence	13
65 cervix cancer incidence	13
66 occupational injuries	13
67 hip fracture incidence	13
68 neonatal mortality (birth -> 28 days)	13
69 Decayed etc. teeth: mean DMF-12 index	13
70 contraceptive use (type, general, 1st intercourse)	13
71 antihypertensive drug treatment	13
72 hospital beds total	12
73 use of illicit drugs (incl. Children)	12
74 colorectal cancer screening	12
75 blood pressure measurement	12
76 utilisation of medicines and medical aids	12
77 expenditures on out-patient care	12
78 fatal accidents at work	12
79 % energy from fat	12
80 death rate all causes	11
81 crude death rate, Eurostat 65 causes	11
82 prenatal care attendance	11
83 population by ethnic origin/citizenship	11
84 % energy from saturated fatty acids	11
85 hip replacement	11
86 literacy rate	11
87 drug-related deaths	11
88 melanoma incidence	11
89 pregnant women smoking	11
90 specified from above: teenage births	10
91 perinatal mortality (stillbirths + birth -> 1 week)	10
92 numbers of deaths, Eurostat 65 causes	10
93 beddays in-patient care	10
94 specified from above: maternal age at 1st birth	10
95 STD, specif. Chlamydia, incidence	10
96 vaccination scheme diseases incidence	10
97 rheumatoid arthritis (incidence, prevalence)	10
98 Limitations in seeing, hearing, mobility, speaking, biting, agility	10
99 alcohol: non-drinkers	10
100 campaigns on smoking, alcohol, diet, safe sex, drug use, sunlight exposure	10
101 pharmacists employed	10
102 total procedures in-patients	10
103 home/leisure injuries	10
104 Limitations in seeing, hearing, mobility, speaking, biting, agility	10
105 amount smoked/person	10
106 breastfeeding at various ages (of child)	10

ranking	(2x1st+2nd)
107 influenza vaccination coverage	10
108 ALOS acute care, selected diagnoses	10
109 hospital discharges for selected diagnoses	10
110 births by mode of delivery: spontaneous, assisted, caesarean	10
111 occupational injuries	9
112 limitations of usual activities, past 6 months, health related	9
113 serum cholesterol measurement	9
114 prenatal screening	9
115 dentists employed	9
116 HIV seroprevalence in pregnant women	9
117 diabetes type 1 incidence in children	9
118 AMI case fatality	9
119 childhood asthma	9
120 limitations in personal care (feeding, dressing, toilet, washing, etc.)	9
121 beddays acute care, selected diagnoses	9
122 CABG	9
123 gestational age distribution (pre-term births)	9
124 glucose tolerance	9
125 lipid-lowering drug treatment	9
126 stage at cancer diagnosis	9
127 total serum cholesterol	9
128 regulations on public smoking	9
129 average length of stay (ALOS) in-patient care	8
130 population by ISCO 2-digit employment type	8
131 GDP	8
132 crude death rate, age intervals	8
133 occupational diseases	8
134 Creutzfeld-jacob disease	8
135 intake of fish	8
136 midwives employed	8
137 Health expenditures by age	8
138 Health expenditures by fund source	8
139 meningitis	8
140 stomach	8
141 noise exposure	8
142 hospital beds psychiatric	8
143 PTCA	8
144 30-days mortality after AMI	8
145 early school leavers	7
146 Prevalence of any chronic illness or condition	7
147 intake of bread/cereals	7
148 environmental determinants of physical activity:	7
149 social isolation/participation	7
150 CT scans	7
151 dentist	7
152 mental health care	7
153 accessibility of care	7
154 delay in cancer treatment	7
155 Population by region	7
156 *maternal mortality, also by cause of death	7
157 Down's syndrome	7
158 alcohol-related traffic accidents	7
159 Cognitive limitations in memory, learning, literacy, attention	7
160 social support	7
161 total health services employment	7