



Euro Health Consumer Index 2006

Health Consumer Powerhouse

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For the first time ever, European healthcare as consumer information!

Europe integrates. People, services and goods cross borders to achieve improved quality of life and economic growth – two critical welfare society indicators. By the ruling of the European Court of Justice, patients can go to another country to access the best health care. Having the right of mobility is excellent – but how is one to exercise it? Where and how is one to access care reducing waiting times and medical risks, optimising outcomes and consumer satisfaction?

Transparency among the European healthcare systems is a key quality not only to consumers but also to every health care stakeholder. Transparency reveals flaws and malfunctions requiring action. Every sophisticated service industry – and health care is very much an operation of that kind – is driven by informed consumer decisions and by the dialogue between the user and the provider. Europeans are of the opinion that their access to information improves the quality of care. To use the full potential of the health care systems, European trans-national information is an essential resource.

2005 we presented an index comparing twelve European national health care systems. Assured by the most positive reception that a full-scale approach ought to be implemented we decided to move ahead with an EU 25 index. Taking a strong consumer view, the 2006 Euro Health Consumer Index wants to add to already existing evaluations by institutions like WHO and OECD. Introducing a different perspective, our Index ranks how user-friendly the national healthcare systems turn out around the Union.

This years EHCI proves an extremely tough competition between half a dozen of countries, all with healthcare systems providing quality to the consumer. We are proud to welcome France the 2006 winner, closely followed by the Netherlands and Germany. To investigate whether consumer-friendly care is mainly a matter of money we have as well compared overall outcomes with the money spent on healthcare in each country. Promising enough, winners of this "bang for the buck" contest are Slovenia and Estonia, delivering excellent value for money to their citizens. To us this suggests that good outcome also is a matter of the right priorities and smart design.

This first EU 25 attempt is very much a tool to be improved. Comments on the 2005 Index by patient organisations, national agencies and other stakeholders have been of great value and contributed to identifying relevant indicators and measurement principles. We advise you not to hook onto every single indicator or figure but rather on the tendencies and systems connections. We hope for a critical but forward-looking discussion following on the launch, sharing insights and ideas to support the development of health consumer empowerment around Europe.

Brussels, June 26, 2006

Johan Hjertqvist President, Health Consumer Powerhouse

1. Content summary

France emerges as the 2006 winner of the Euro Health Consumer Index (EHCI), with a technically efficient and generously providing healthcare system. France scores 576 out of 750 maximum points. It is sometimes argued that "the French healthcare system has severe budget deficit problems". The author would like to note that budget deficits in public sector areas, which are not financed for performance *and* work in a situation of competition, are more or less arbitrary! As long as "France, S.A." is reasonably solvent, black or red figures in its healthcare system are not very significant.

The scoring has intentionally been done in such a way that the likelihood that two states should end up sharing a position in the ranking is almost zero. It must therefore be noted that France, the Netherlands, Sweden, Switzerland, Germany and Luxembourg are really very difficult to separate, and that very subtle changes in single scores modify the internal order of these six top countries.

One interesting thing about the top six states is that they achieve their top positions in very different ways. Sweden reaches 4th place almost entirely because of a solid victory in the Outcomes quality discipline, and with very poor performance on Accessibility. (Radically improving Medical Outcomes is a much more laborious and much longer process than reducing waiting times.) This means that if healthcare officials and politicians took to looking across borders, and "steal" good things from their EU neighbours, there is a good chance for a nation to come much closer to the theoretical top score of 750.

In southern Europe, Spain and Italy provide excellent healthcare services. Real excellence in southern European healthcare seems to be a bit too much dependent on the consumers' ability to afford private healthcare as a supplement to public healthcare for these countries to reach top scores.

A mixed performance is shown by the UK, which wins out on healthcare information. The overall U.K. score is dragged down by waiting lists and uneven quality performance.

The CEE member states are doing surprisingly well, considering their much smaller healthcare spend in Purchasing Power adjusted dollars per capita. However, readjusting from planned to consumer-driven economies does take time. Slovenia and Estonia, being the smallest ships to turn around, seem to lead this subgroup, and are clear winners in the academic exercise in our value-for-money adjusted Index – the "Bang-for-the-Buck" score.

2. Introduction

The Health Consumer Powerhouse (HCP) has become a centre for visions and action promoting consumer-related healthcare in Europe. Tomorrow's health consumer will not accept any traditional borders. In order to become a powerful actor, building the necessary reform pressure from below, the consumer will need access to knowledge to compare health policies, consumer services and quality outcomes. HCP wants to add to this development.

2.1 Background

Since 2004 we have published the Swedish Health Consumer Index (www.vardkonsumentindex.se, also in an English translation). By ranking the 21 county councils by 12 basic indicators concerning the design of "systems policy", consumer choice, service level and access to information we introduced benchmarking as an element in consumer empowerment.

For the pan-European index in 2005, HCP aimed to basically follow the same approach, *i.e.* selecting a number of indicators describing to what extent the national healthcare systems are "user-friendly", thus providing a basis for comparing different national systems.

Though still a somewhat controversial standpoint, HCP advocates that quality comparisons within the field of healthcare is a true win-win situation. To the consumer, who will have a better platform for informed choice and action. To governments, authorities and providers, the sharpened focus on consumer satisfaction and quality outcomes will support change. This goes not only for evidence of shortcomings and method flaws but also illustrates the potential for improvement. With such a view the EHCI is designed to become an important benchmark system supporting interactive assessment and improvement.

2.2 Project Manager

Project Management for the EHCI 2006 has been executed by Arne Björnberg, Ph.D.

Dr. Björnberg has previous experience from Research Director positions in Swedish industry. His experience includes having served as CEO of the Swedish National Pharmacy Corporation ("Apoteket AB"), Director of Healthcare & Network Solutions for IBM Europe Middle East & Africa, and CEO of the University Hospital of Northern Sweden ("Norrlands Universitetssjukhus", Umeå).

Dr. Björnberg was also the project manager for the EHCI 2005 project.

3. Index scope

The aim has been to select a limited number of indicators, within a definite number of evaluation areas, which in combination can present a telling tale of how the healthcare consumer is being served by the respective systems.

4. Main content of EHCI 2005

4.1 Which nations?

Countries which were included in the EHCI 2005: Belgium, Estonia, France, Germany, Hungary, Italy, the Netherlands, Poland, Spain, Sweden, the United Kingdom and, for comparison, Switzerland.

Initially, the healthcare systems of eleven EU member states, plus Switzerland, were compared. To include all 25 member states right from the start would have been a very difficult task, particularly as many memberships are recent, and would present dramatic methodological and statistic difficulties. Already this initial, limited selection has in itself been an ambitious undertaking, and the project has been drawing on existing knowledge and data in cooperation with existing organisations, to inspire good ideas, share knowledge, warn about previous mistakes and errors and provide leads to valuable sources of information.

The EHCI 2005 was seeking for a representative sample of large and small, long-standing and recent EU membership states.

The selection was influenced by a desire to include all member states with a population of ~40 million and above, along with the above-mentioned mix of size and longevity of EU membership standing. As the Nordic countries have fairly similar healthcare systems, Sweden was selected to represent the Nordic family, purely because the project team members had a profound knowledge of the Swedish healthcare system.

As already indicated, the selection criteria had nothing to do with healthcare being publicly or privately financed and/or provided. For example, the element of private providers is specifically not at all looked into (other than potentially affecting access in time or care outcomes).

EHCI 2005 was the initial "pilot heat". In 2006 it was aimed for the final EU-25 contest, with potentially a different set of winners.

5. EHCI 2006

One important conclusion from the work on EHCI 2005 is that it is indeed possible to construct and obtain data for an index comparing and ranking national healthcare systems seen from the consumer/patient's viewpoint.

For this year's release of the EHCI, the ambition has been to include all 25 EU member states using essentially the same methodology.

With a more adequate project time than was the case for the 12-nation pilot, it has been possible to achieve a higher level of reliability of information.

To do this, one essential work ingredient has been to establish a net of contacts directly with national healthcare authorities in a more systematic way than was the case for the 2005 issue. The weaknesses in European healthcare statistics described in the EHCI 2005 report can only be offset by in-depth discussions with key personnel at a national healthcare authority level.

In general, the responsiveness from Health Ministries, or their state agencies in charge of supervision and/or Quality Assurance of healthcare services, has been good. Most emphasis has been put on contacts with institutions in countries not included in the EHCI 2005, as open sources such as the WHO or OECD are not as well stocked with data from those states.

5.1 Indicators omitted from EHCI 2005 in the 2006 Index

Of the totally 20 indicators used for the EHCI 2005, two have been taken out from the 2006 Index:

Healthcare a service? Country position, as stated by the respective European Parliament representatives, on "Healthcare to be treated as a service included in the proposed Service Directive" was the indicator used. For the time being, this issue is politically barely alive, and (probably for that reason) member state positions are difficult to assess.

"Convenience of payment deferral" for care not paid for by basic public systems. This indicator was an attempt at measuring how easy and convenient it is for citizens of different states to use their personal consumer power to purchase healthcare services. Canada is the only (?) country in the OECD or EU, where personal consumption of healthcare services is actually formally restricted. However, in many states there is a pronounced absence of streamlined procedures for purchasing private healthcare, particularly in comparison with how vendors more or less throw goods after customers with scores of convenient systems for payment.

The HCP still considers this a vital indicator. Unfortunately, we have to concede that we have been unable to measure this indicator in a way that is reliable enough to retain the indicator in the EHCI. Therefore, this indicator has, at least temporarily, been taken out from the EHCI indicator set.

The HCP deeply regrets having had to omit these two indicators in the 2006 Index, as they both should be considered important measures on the consumer friendliness of a healthcare service system.

5.2 Indicators selected for EHCI 2006

The project work on the Index has become a compromise between which indicators were judged to be most significant for providing information about the different national healthcare systems from a user/consumer's viewpoint, and the availability of data for

these indicators. This is a version of the classical problem "Should we be looking in the dark alley for the 50-dollar bill, or under the lamppost for the dime?"

It has been deemed important to have a mix of indicators in different fields; areas of service attitude and customer orientation as well as indicators of a "hard facts" nature showing healthcare quality in outcome terms. It was also decided to search for indicators on actual results in the form of outcomes rather than indicators depicting procedures, such as "needle time" (time between patient arrival to an A&E department and trombolytic injection), percentage of heart patients trombolysed or stented, etcetera.

Intentionally de-selected were indicators measuring public health status, such as life expectancy, lung cancer mortality, total heart disease mortality, diabetes incidence, etc. Such indicators tend to be primarily dependent on lifestyle or environmental factors rather than healthcare system performance. They generally offer very little information to the consumer wanting to choose among therapies or care providers, waiting in line for planned surgery, or worrying about the risk of having a post-treatment complication or the consumer who is dissatisfied with the restricted information.

After research and discussions with key persons in European institutions, the following indicator areas and indicators were picked for the EHCI 2006. The performance of the respective national healthcare systems were graded on a three-grade scale for each indicator, where the grades have the rather obvious meaning of green = good (3), amber = so-so (2) and red = not-so-good (1).

5.2.1 Indicator areas

The 2006 Index is, just like in 2005, built up as a "pentathlon", with indicators grouped in five sub disciplines. Four of these remain from the 2005 Index, with some indicators regrouped.

It has been commented from a number of observers, not least healthcare politicians in countries having pronounced waiting time problems, that absence of waiting times could be a result of "meanness" – national healthcare systems being restrictive on who gets certain operations could naturally be expected to have less waiting list problems.

In order to test this, the new sub discipline "Generosity of public healthcare systems", or shorter "Provision levels" has been introduced. A problem with this sub discipline is that it is only too easy to land in a situation, where an indicator becomes just another way of measuring national wealth (GDP/capita). The indicator "Number of hip joint replacements per 100 000 inhabitants" is one prominent example of this. The cost per operation of a hip joint is in the neighbourhood of \in 7000. That cost, for a condition that might be crippling but not life-threatening, results in Provision levels being very closely correlated to GDP/capita.

Cataract operations seem a better and less GDP-correlated indicator on the Generosity of public healthcare systems. The cost per operation is only one tenth of that for a hip joint and thus much more affordable in less affluent countries. Interestingly, Belgium – a country with minimal waiting list problems, and which was most often to us accused of achieving this through restrictiveness, by far has (along with Canada) the highest provision levels for cataract operations in the OECD.

The second indicator selected under Provision levels is "Is dental care a part of the public healthcare offering?" As a measure of this, the very simple indicator "What percentage of public healthcare spend is made up by dental care?" was selected, on the logic that if dental care accounts for close to 10 % of total public healthcare expenditure, this must mean that dental care is essentially a part of the public healthcare offering.

The indicator areas for the EHCI 2006 thus became:

Sub discipline	Number of indicators
Patient rights and information	10
Waiting time for treatment	5
Outcomes	6 (+ "HbA1c levels for diabetics" outside of competition
Provision levels	3
Pharmaceuticals	4

5.3 The mathematics of scoring in the EHCI 2006

In the EHCI 2005, the green 3, amber 2 and red 1 were just added up to make up the country scores.

For the 2006 Index, we have used a different methodology: For each of the five sub disciplines, the country score has been calculated as a percentage of the maximum possible (e.g. for Waiting times, the score for a state has been calculated as % of the maximum 3 x 5 = 15). These percentages have then been multiplied by 100.

Thereafter, the sub discipline scores have been multiplied by the weight coefficients given in the following section and added up to make the final country score, which has been rounded to a three digit integer.

5.3.1 Weight coefficients

The possibility of introducing weight coefficients was discussed already for the EHCI 2005, *i.e.* selecting certain indicator areas as being more important than others and multiplying their scores by numbers other than 1. In the EHCI 2005, the five subdisciplines were given implicit weights created by the sheer number of indicators under each sub-discipline. For example, in the 2005 Index this meant that "Patient Rights and Information" was given a weight of 1.75, compared with 1.0 for medical Outcomes and 1.25 for Accessibility/Waiting times.

For the EHCI 2006 explicit weight coefficients for the five sub-disciplines have been introduced after a careful consideration of which indicators should be considered for higher weight. The accessibility and outcomes sub disciplines were decided as the main candidates for higher weight coefficients based mainly on discussions with expert panels

and experience from a number of patient survey studies. Here, as for the whole of the Index, we welcome input on how to improve the Index methodology.

In the EHCI 2006, the scores for the five sub disciplines have been given the following weights:

Sub discipline	Relative weight
Patient rights and information	1.5
Waiting time for treatment	2.0
Outcomes	2.0
Provision levels	1.0
Pharmaceuticals	1.0
Total sum of weights	7.5

Consequently, the maximum theoretical score attainable for a national healthcare system is 750. The lowest possible is 250.

It should be noted that, as there are not many examples of countries that excel in one sub discipline but do very poorly in others, the final ranking of countries presented by the EHCI 2006 is remarkably stable if the weight coefficients are varied within reasonable limits.

The project has also been experimenting with other sets of scores for green, amber and red, such as 2, 1 and 0 (which would really punish low performers), and also 4, 2 and 1, (which would reward real excellence). The final ranking is remarkably stable also during these experiments.

EHCI 2006 report

5.4 Indicator definitions for EHCI 2006

Sub discipline	Indicator	Comment	Score 3	Score 2	Score 1	Main Information Sources
Patient rights and information	Patients' Rights Law	If national HC legislation is based on obligations of providers and/or insurers, that is a "No" on this indicator.	Yes	Various kinds of patient charters or similar by laws	No	http://home.online.no/~wkeim/patients.htm#liste
	Patient organisations involved in decision making?		Yes, statutory	Yes, by common practice in advisory capacity	No, not compulsory or generally done in practice	Patients' Perspectives of Healthcare Systems in Europe; survey commissioned by HCP 2006. Personal interviews.
	No fault malpractice insurance	Can patients get compensation without the assistance of the judicial system in proving that medical staff made mistakes?	Yes	Fair; > 25% invalidity covered by the state	No	Swedish National Patient Insurance Co. (All Nordic countries have no1fault insurance)
	Is there a patient ombudsman	("Watchdog") (a position or organisational unit)	Yes	Yes, but feeble powers	No	"The Ombudsman in Healthcare: protecting patients' rights?" (Lars Fallberg, Stephen Mackenney, George Annas, 2006) Patients' Perspectives of Healthcare Systems in Europe; survey commissioned by HCP 2006. Personal interviews.

Right to second opinion		Yes	Yes, but difficult to access due to bad information, bureaucracy or doctor negativism	No	Patients' Perspectives of Healthcare Systems in Europe; survey commissioned by HCP 2006. Health and Social Campaigners' News International: Users' perspectives on healthcare systems globally, Patient View 2005. Personal interviews.
Access to own medical record		Yes	Yes, restricted or with intermediary	No	Patients' Perspectives of Healthcare Systems in Europe; survey commissioned by HCP 2006. Health and Social Campaigners' News International: Users' perspectives on healthcare systems globally, Patient View 2005. Personal interviews.
Repetitive prescriptions available to patients	Without (another) doctor appointment	Yes, for more than 6 months' supply	Yes, for up to 6 months' supply	No (doctor appointment required for each new filling of prescription)	Patients' Perspectives of Healthcare Systems in Europe; survey commissioned by HCP 2006. Personal interviews.
Access to the e- mail address of family doctor?	Can patients readily access the e-mail address of their family doctor?	Yes, frequently	Yes, for a limited share of doctors	No, except in rare cases	Patients' Perspectives of Healthcare Systems in Europe; survey commissioned by HCP 2006. Personal interviews.
Provider catalogue with quality ranking	"Dr. Foster" in the U.K. remains the only known European qualification for a "Yes" (green score). The "750 best clinics" published by LePoint in France would warrant a Yellow.	Yes	"Not really", but nice attempts under way	No	Dr. Foster alone in Europe? Nice NL initiatives. http://www.drfoster.co.uk/home.aspx

	Web or 24/7 telephone healthcare info	Information which can help a patient make decisions of the nature: "After consulting the service, I will take a paracetamol and wait and see" or "I will hurry to the A&E department of the nearest hospital"	Yes	Yes, but not generally available	No	Patients' Perspectives of Healthcare Systems in Europe; survey commissioned by HCP 2006. Personal interviews.
	Family doctor same day service		Yes	Yes, but not quite fulfilled	No	Patients' Perspectives of Healthcare Systems in Europe; survey commissioned by HCP 2006. Health and Social Campaigners' News International: Users' perspectives on healthcare systems globally, Patient View 2005. Personal interviews.
Waiting time for treatment	Direct access to specialist care	Without referral from family doctor (GP)	Yes	Not really, but quite often in reality	No	OECD data: Siciliani & Hurst, 2003 1 2004. Personal interviews with healthcare officials. Patients' Perspectives of Healthcare Systems in Europe; survey commissioned by HCP 2006.
	Knee/hip joint		90% <90 days	50 - 90% <90 days	> 50% > 90 days	OECD data: Siciliani & Hurst, 2003 1 2004. Personal interviews with healthcare officials.
	Cancer		90% <21 days	50 - 90% <21 days	> 50% > 21 days	OECD data: Siciliani & Hurst, 2003 1 2004. Personal interviews with healthcare officials.
	Heart bypass/ PTCA		90% <90 days	50 - 90% <90 days	> 50% > 90 days	OECD data: Siciliani & Hurst, 2003 1 2004. Personal interviews with healthcare officials.
Outcomes	Heart infarct mortality <28 days after hospital		<18%	<25%	>25%	MONICA data. Personal interviews with healthcare officials. Eur Soc Card have data, but will not reveal country ID:s. For some states, extreme mortality values.

	Infant deaths/1000 live births		<4	< 6	> 6	WHO Europe Health for All mortality database. Latest available statistics.
	Breast cancer mortality, SDR/100000		<25	25 - 30	>30	WHO Europe Health for All mortality database. Latest available statistics.
	Colorectal cancer mortality, SDR/100000		< 20	20 - 25	>25	WHO Europe Health for All mortality database. Latest available statistics.
	MRSA infections		<5%	<20%	>20%	EARSS; latest available data 2003/2004/2005
	Diabetes: % of patients with high HbA1c levels	This indicator is included outside of competition!	<10% of patients above 9 % HbA1c	<20% of patients above 9 % HbA1c	>20% of patients above 9 % HbA1c	Healthcare Quality Indicators Project, Initial Indicators Report, Edward Kelley and Jeremy Hurst, OECD 2006
	Avoidable deaths - Potential years of Life Lost (PYLL)	per 100000 pop 0-69	<3500	3501 - 4500	> 4500	OECD Health Data 2005
Provision levels ("generosity" of public healthcare systems)	Cataract operation rates per 100000 citizens (age- adjusted)		>700	400 - 700	<400	OECD Health Data 2005
	Infant poliomyelitis vaccination %		≥97 %	≥90 - <97%	<90 %	WHO Europe Health for All mortality database. Latest available statistics.

	Is dental care a part of the offering from public HC systems?		> 9 % of total healthcare spend	9 % - 5 % of total healthcare spend	< 5 % of total healthcare spend	EU Manual on Dental Health, EU Dental Liaison Committee
	Rx subsidy %		>90%	60 - 90%	<60%	http://www.efpia.org/6_publ/infigure2004h.pdf 2005 update? WHO Health for All database 2005
	Layman-adapted pharmacopoeia?	Is there a layman-adapted pharmacopoeia readily accessible by the public (www or widely available)?	Yes	Yes, but not really easily accessible or frequently consulted	No	Patients' Perspectives of Healthcare Systems in Europe; survey commissioned by HCP 2006. Personal interviews. LIF Sweden.
Pharmaceuticals	Speed of deployment of novel cancer drugs – how quickly are new cancer drugs made available through public healthcare?		Quicker than EU average	Close to EU average	Slower than EU average	"A pan-European comparison regarding patient access to cancer drugs", Nils Wilking & Bengt Jönsson, Karolinska Institute, Stockholm
	Access to new drugs	Between registration and inclusion in subsidy system	>120 days	<300 days	>300 days	European Federation of Pharmaceutical Industries and Associations (EFPIA), European Observatory: Healthcare Systems in Transition (HiT)

5.4.1 Threshold value settings

It has not been our ambition to establish a global, scientifically based principle for threshold values to score green, amber or red on the different indicators. Threshold levels have been set after studying the actual parameter value spreads, in order to avoid having indicators showing "all green" or "totally red".

No rule without exception though. Among indicators which are new for the 2006 Index, is "Patient access to e-mail address of family doctor". From the outset, it was regarded as highly likely that no EU member state would score green on this indicator. As it was deemed a good indicator of the consumer friendliness of a healthcare system, it has been included nevertheless.

Also, the HCP believes that Patient Organisation involvement in healthcare decision making is a good idea. This indicator has been included, with no country scoring green.

5.5 Symmetry of in data

It is important to note that there is absolutely no symmetry in the data used for the scores in the EHCI.

The project has consequently been using "latest available" statistics. As an example, this means that the EHCI compares cancer survival data from 1997 from one country with 2005 data from other countries. We have also allowed ourselves to test official policy decisions in a patient survey, and also by interviews with healthcare officials. In some cases, where real life practice does not coincide with official policy decisions, scores have been modified accordingly.

6. Where does the European health consumer in 2006 find the most user-friendly healthcare system?

6.1 General overview of European conditions

The current (2002) situation for European healthcare systems is commented on the following quote from the WHO European Health Report:

"Health systems and services are undergoing major transformations in the European Region.

First, countries are striving to better balance sustainability and solidarity in financing. Most western European countries maintain relatively high levels of solidarity. While the CCEE (former centrally planned economies of Eastern Europe) and NIS (new states,

formerly parts of the Soviet Union) are also committed to solidarity in finance, problems with the economic sustainability of new insurance mechanisms lead in many cases to considerable reductions in the accessibility and affordability of health services.

Second, there is an increasing trend towards strategic purchasing as a way of allocating resources to providers to maximize health gain, including separating provider and purchaser functions, moving from passive reimbursement to proactive purchasing, and selecting providers according to their cost-effectiveness. Contracting mechanisms and performance-based payment become central to effective purchasing.

Third, countries are adopting more aggressively updated or new strategies to improve efficiency in health service delivery.

Fourth, effective stewardship is proving central to the success of health system reform. The government mostly plays this role, involving health policy leadership, appropriate regulation and effective intelligence, but stewardship may also involve other bodies such as professional organizations."

This and several other reports provide thorough descriptions of the public health situation in European countries.

There is less good availability of reports on the actual performance of healthcare systems, expressed in "customer value" terms such as quantitative and qualitative output, service and information levels and value for money spent. The statistics on European healthcare systems tend to focus on quantitative resource inputs such as staff numbers, beds and bed occupancy, and at best statistics on procedures such as "needle time" or "% of patients receiving trombolysis treatment".

For a country like the USA, where healthcare financing and provision has been looked upon as a service industry, statistics on performance quantity and quality are abundant.

6.2 The Index outcomes

As is illustrated by the Index Matrix, EHCI 2006 consists of a total of 28 indicators in five sub-areas, describing 26 national healthcare systems. The aim has been to select such indicators, which should be relevant for describing a healthcare system viewed from the consumer/patient's angle.

The performance of the respective national healthcare systems was graded on a three-grade scale for each indicator, where the grades have the rather obvious meaning of green = good(3), amber = so-so(2) and red = not-so-good(1).

		Austria	Belgium	Cyprus	Czech Republic	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxemburg	Malta	Netherlands	Poland	Portugal	Slovakia	Slovenia	Spain	Sweden	Switzerland	United Kingdom
	Patients' Rights Law	2	3	3	1	3	2	3	3	1	3	3	2	2	1	3	1	1	3	2	2	2	2	2	1	3	2
	Patient organisations involved in decision making?	1	2	1	2	2	2	2	1	1	1	1	2	1	2	1	2	1	2	1	2	1	1	1	2	1	2
	No fault malpractice insurance	1	1	1	1	3	1	3	2	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	3	1	1
Patient rights and information	Is there a patient ombudsman?	3	2	2	2	1	1	2	1	2	3	3	1	1	1	1	1	1	3	3	1	1	2	2	1	1	3
and inionnation	Right to second opinion	3	1	2	2	3	1	2	3	3	2	2	1	2	1	3	3	3	3	2	2	2	3	2	2	3	1
	Access to own medical record	3	3	2	3	3	2	3	1	2	2	3	2	2	2	3	3	1	3	2	2	3	3	3	3	2	2
	Repetitive prescriptions available to patients	2	3	3	1	3	2	3	3	2	1	3	2	2	1	1	3	1	3	2	3	1	3	1	3	3	2
	Access to the e-mail address of family doctor?	1	2	1	1	2	3	2	2	2	1	1	1	1	2	1	1	2	2	1	2	1	1	1	2	1	1
	Provider catalogue with quality ranking	1	1	2	1	1	1	1	2	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	3
	Web or 24/7 telephone healthcare info	1	3	1	1	2	2	2	1	2	1	1	1	1	1	1	1	3	2	1	3	1	1	1	2	2	3
	Family doctor same day service	2	3	2	3	3	2	1	3	3	2	3	1	2	3	2	3	3	3	3	2	3	3	1	1	2	2
Waiting time for	Direct access to specialist care	2	3	3	3	1	1	1	3	3	2	2	1	1	2	2	3	3	1	1	1	1	1	1	2	3	1
treatment	Knee/hip joint	2	3	1	1	2	1	1	3	3	1	1	1	2	1	1	3	1	2	1	1	1	1	2	1	3	1
	Cancer	2	3	1	1	2	1	1	3	3	1	2	1	2	2	1	3	3	2	1	1	1	1	2	2	3	1
	Heart bypass/ PTCA	2	3	1	1	2	1	1	3	3	1	2	1	2	2	1	3	1	3	1	3	1	2	2	1	3	1

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	Heart infarct mortality <28 days after hospital	1	2	1	1	1	1	2	2	2	1	1	2	2	1	1	2	1	3	1	1	1	3	2	3	3	3
	Infant deaths/1000 live births	2	2	2	3	2	1	3	2	2	2	1	1	2	1	1	2	2	2	1	3	1	3	2	3	2	2
	Breast cancer mortality, SDR/100000	2	1	2	2	1	3	3	2	2	3	1	2	2	1	2	2	2	1	3	3	3	2	3	3	2	1
	Colorectal cancer mortality, SDR/100000	2	2	2	1	1	3	3	3	2	3	1	2	3	1	2	2	2	2	2	2	1	1	2	3	3	3
	Diabetes: % of patients with high HbA1c levels							(2)	(2)	(2)		(2)		(2)					(2)					(3)	(1)		(2)
	MRSA infections	2	1	1	2	3	3	3	1	2	1	2	1	1	1	1	2	1	3	2	1	2	2	1	3	1	1
	Avoidable deaths – Potential years of Life Lost (PYLL)	2	2	2	1	2	1	2	2	2	3	1	2	3	1	1	2	2	3	1	1	1	1	2	3	3	2
Provision levels	Cataract operation rates per 100000 citizens (age- adjusted)	3	3	1	1	2	2	3	3	2	2	2	2	3	2	1	3	3	2	1	1	1	3	1	3	2	2
("generosity" of public healthcare systems)	Infant poliomyelitis vaccination %	1	2	3	2	2	2	2	3	2	1	3	1	3	3	1	3	2	3	3	2	3	1	2	3	2	2
	Dental care a part of public healthcare offering?	3	1	1	2	1	1	2	2	3	3	3	1	1	1	2	1	3	1	3	1	1	3	1	2	1	1
	Rx subsidy %	2	2	1	2	1	2	1	3	3	2	2	3	3	1	1	3	2	3	2	2	3	3	3	2	3	3
	Layman-adapted pharmacopoeia	1	1	1	1	3	1	2	1	1	1	1	1	1	1	1	1	1	3	1	2	1	1	1	3	1	1
Pharmaceuticals	Speed of deployment of novel cancer drugs	3	2	2	1	2	2	2	2	2	2	1	2	2	1	1	1	1	2	1	2	1	1	3	2	3	1
	Access to new drugs	3	1	3	1	1	3	2	1	3	1	3	2	1	1	1	1	1	2	1	2	1	2	2	3	2	3
	Total score	498	533	422	403	473	421	496	576	571	434	453	359	471	365	340	546	463	572	409	435	369	466	434	566	563	436
	Rank	8	7	19	22	10	20	9	1	3	17	14	25	11	24	26	6	13	2	21	16	23	12	17	4	5	15
		Austria	Belgium	Cyprus	Czech Republic	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxemburg	Malta	Netherlands	Poland	Portugal	Slovakia	Slovenia	Spain	Sweden	Switzerland	United Kingdom

Numbers, which show up as *italics of lighter coulour and underlined* in the table above indicate that either the state in question or an agency such as the WHO or EARSS has informed the HCP that the data are not available. Numbers in *italics of lighter coulour* are based on semi-quantitative analysis from sources such as the European Observatory HiT reports, and should be looked at with particular caution, but which still are probably well above "radio noise" quality.

6.3 Results Summary

This second attempt at creating a comparative index for national healthcare systems has confirmed that there is a group of EU member states, which all have good healthcare systems seen from the customer/consumer's point of view.

The scoring has intentionally been done in such a way that the likelihood that two states should end up sharing a position in the ranking is almost zero. It must therefore be noted that France, the Netherlands, Sweden, Switzerland, Germany and Luxembourg are really very difficult to separate, and that very subtle changes in single scores modify the internal order of these six top countries.

Nevertheless, France emerges as the 2006 winner of the Euro Health Consumer Index, with a technically efficient and generously providing healthcare system. France scores 576 out of 750 maximum points. It is sometimes argued that "the French healthcare system has severe budget deficit problems". The author would like to note that budget deficits in public sector areas, which are not financed for performance *and* work in a situation of competition, are more or less arbitrary! As long as "France, S.A." is reasonably solvent, black or red figures in its healthcare system are not very significant.

One interesting thing about the top six states is that they achieve their top positions in very different ways; Sweden lands a bronze medal almost entirely to a solid victory in the Outcomes quality discipline, and with very poor performance on Accessibility. (Radically improving Medical Outcomes is a much more laborious and longer process than reducing waiting times.) This means, that if healthcare officials and politicians took to looking across borders, and "stealing" good things from their EU comrades, there is a good chance for a state to come much closer to the theoretical top score of 750.

Subsequent versions will in all likelihood have a modified set of indicators, as more data becomes available.

6.3.1 Country scores

There are no countries which excel across the entire range of indicators. The national scores seem to reflect more of "national and organisational cultures and attitudes", rather than mirroring how large resources a country is spending on healthcare. The cultural streaks have in all likelihood deep historical roots. Turning a large corporation around takes a couple of years – turning a country around can take decades!

Countries with pluralistic financing systems, *e.g.* offering a choice of health insurance solutions, which also provide the citizen with a choice between providers regardless of whether these are public, private, non-profit or for-profit, generally score high on Patient rights and information issues. Under this sub-set of indicators countries like the

Netherlands and Sweden score high on openness and patients' access to their own medical information. Scores of countries, like Germany and France, suffer from what seems to be an expert-driven attitude to healthcare, where the patient access healthcare information with healthcare professionals as intermediaries rather than directly.

In an attempt to summarize the main features of the scoring of each country included in the EHCI 2006, the following table gives a somewhat subjective synopsis. To the care consumer – i.e. most of us – describing and comparing healthcare will require some simplifications. (A medical information system dealing with scientific evidence such as individual diagnosis or medication guidelines of course requires very strict criteria; the EHCI must be regarded as consumer information, and can by no means be considered as scientific research).

Country	Scoring Synopsis
Austria	Quite good overall – could probably have scored even higher had Austrian health authorities been keener on supplying last available data. According to the large expert study Eurocare 3, Austria leads the EU on overall cancer survival.
Belgium	Excels at accessibility, suffers on outcome quality
Cyprus	Problematic, as no other member state has as high a proportion of healthcare being privately funded. The score nevertheless confirms the European Observatory HiT report finding that Cypriotic healthcare is on par with average in the EU.
Czech Republic	Takes care of its citizens – almost Japanese level of visits to doctors per citizen (15 times/year on average). Good on diabetes care (hope for the 2007 Index), but cannot afford modern pharmaceuticals.
Denmark	Danes satisfied with primary care, but outcomes not really great.
Estonia	It takes more than a dozen years to change a top-down planned economy to become a customer-driven one. Estonia, its population of 1½ million people, seems to be catching up faster than bigger nations. Good on MRSA infections and efficient financial administration of pharmaceuticals. In top of the Value-for-money adjusted scores!
Finland	Not too different from Sweden; really good outcomes. If Finland improves the waiting list situation, they can be a top contender.
France	The WHO (2000) world's #1 on healthcare system performance, and also a top scorer in the EHCI; technically efficient and quite generous. Reasonably good outcomes quality but slightly authoritarian. You want healthcare information – ask your doctor!
Germany	The customer rules! Would be really great, but lacks the cutting edge for quality. You want healthcare information – ask your doctor!
Greece	Doctors rule.
Hungary	It takes more than a dozen years to change a top-down planned economy to become a customer-driven one. Not very good on

	outcomes in spite of 60 years of publicly financed healthcare.
Ireland	With severe waiting list problems and less than fantastic outcomes quality Ireland does not score very well. The Health Service Executive reform can hopefully start changing this.
Italy	Technically not too bad, but CERGAS, an institute for healthcare management, in Milan confirms that an autocratic attitude from doctors (and other Italians in superior positions, in and out of uniform) prevents Italy from scoring high in a consumer index.
Latvia	At this point in time lacking in resources and organisational culture to be a really consumer-adapted system.
Lithuania	A healthcare system in a state of thorough reformation – scope and hope for better score in 2007.
Luxembourg	Has what it takes in the form of financial resources. Should be and is a top scorer.
Malta	Technically Maltese healthcare performs not too bad.
Netherlands	Openness, many financing options and good on outcomes quality. Has not degraded since 2005, suffers in 2006 as two top score indicators have been omitted!
Poland	It takes more than a dozen years to change a top-down planned economy to a customer-driven one. Poor access to new drugs – a cost saving measure?
Portugal	Not as advanced as Spanish neighbours. Good improvement on infant mortality. Better data suppliers than their neighbours, they score better in 2006.
Slovakia	Not as financially stable as Czech neighbours, and not really consumer-oriented.
Slovenia	Similarities to the Austrian system – does well, especially in the BFB-adjusted score.
Spain	Up and coming? Private healthcare still has a very strong position.
Sweden	Excels at outcome quality and openness. Really bad at accessibility and service.
Switzerland	Running outside of EU competition. In a consumer Index, a system based on individual responsibility since time began does score high. Good but expensive.
United Kingdom	Mediocre overall performer. Good on heart problems. Star performer on healthcare information! The new Freedom of Information Act will hopefully improve score on openness indicators.

6.3.2 Results in "Pentathlon"

The EHCI is made up of five sub-disciplines. As there no country excels across all aspects of measuring a healthcare system, it can therefore be of interest to study how the 26 countries rank in each of the five parts of the "pentathlon. The scores within each sub-discipline are summarized in the following table:

	Austria	Belgium	Cyprus	Czech Republic	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxemburg	Malta	Netherlands	Poland	Portugal	Slovakia	Slovenia	Spain	Sweden	Switzerland	United Kingdom
Patient rights and information	18	16	18	15	23	17	23	19	17	16	19	14	14	13	16	17	15	24	17	19	14	18	15	20	18	20
Waiting time for treatment	10	15	8	9	10	6	5	15	15	7	10	5	9	10	7	15	11	11	7	8	7	8	8	7	14	6
Outcomes	11	9	10	10	10	12	16	12	12	13	7	10	13	6	8	12	10	14	10	11	9	12	12	18	14	12
Provision levels	7	6	5	5	5	5	7	8	7	6	8	4	7	6	4	7	8	6	7	4	5	7	4	8	5	5
Pharmaceuticals	9	6	7	5	7	8	7	7	9	6	7	8	7	4	4	6	5	10	5	8	6	7	9	10	9	8

As the table indicates, the total top position of the French healthcare system is to a great extent a product of good accessibility and generous provision levels.

The Netherlands seem to keep their top position for "Consumer friendliness", which is most closely reflected in the "Patient rights and information" discipline, where Denmark and Finland seem to be strong runners up. What is also strongly indicated is that the Swedish healthcare system would be a real top contender, were it not for an accessibility situation, which by Belgian, French and German standards can only be described as abysmal. Finally, some countries, most probably Switzerland and Austria, would probably do better if healthcare data in Europe were more readily available

6.4 National and organisational cultures

Some indicators seem to reflect national and organisational culture streaks rather than formal legislative or financial circumstances.

Waiting times, usually considered to be of vital interest to healthcare consumers, seems to be one such indicator area. As is also observed by Siciliani & Hurst of the OECD Health Group, the existence of waiting times is strongly correlated to the presence of regulations forcing the patient to access specialist care by going through a primary care procedure in order to get a referral to a specialist (the "gate-keeping" function). In general, countries with gate-keepers exhibit waiting lists – countries where patients are allowed direct access to specialists do not.

In general, countries which have a long tradition of plurality in healthcare financing and provision, *i.e.* with a consumer choice between different insurance providers, who in turn do not discriminate between providers who are private for-profit, non-profit or public, show common features not only in the waiting list situation, but also in the readiness to allow the seeking of healthcare in other countries than the patient's homeland.

7. Bang-For-the-Buck adjusted scores

With all 25 EU member states included in the EHCI, it becomes apparent that the Index tries to compare states with very different financial resources. The annual healthcare spend, in PPP-adjusted (Purchasing Power Parity) US dollars, varies from around \$ 500 in Poland and Latvia to above \$ 3500 in Switzerland and Luxemburg. Continental Western Europe and Nordic countries generally fall between \$ 2300 and \$ 2800. (Oil-rich Norway, not in the Index, has recently overtaken Switzerland on healthcare spending.) As a separate exercise, the EHCI 2006 has had added to it a value for money adjusted score: the Bang-For-the-Buck adjusted score, or "BFB Score".

7.1 BFB adjustment methodology

It is not obvious how to do such an adjustment. If scores would be adjusted in full proportion to healthcare spend per capita, the effect would simply be to elevate all less affluent states to the top of the scoring sheet.

This, however, would be decidedly unfair to the financially stronger states. Even if HC spending is PPP adjusted, it is obvious that even PPP dollars go a lot further to purchase healthcare services in member states, where the monthly salary of a nurse is €200, than in states where nurse's salaries exceed €3500. For this reason, the PPP adjusted scores have been calculated as follows:

Healthcare spends per capita in PPP dollars have been taken from the WHO HfA database.

For each country has been calculated *the square root* of this number. The reason for this is that domestically produced healthcare services are cheaper roughly in proportion to the

HC spend. The basic EHCI scores have been divided by this square root. For this exercise, the basic scoring points of 3, 2 and 1 have been replaced by 2, 1 and 0. In the basic EHCI, the minimum score is 250 and the maximum 750. With 2, 1 and 0 the scores run between 0 and 500. This does not change the relative positions of the 26 countries (or at least very marginally), but is necessary for a value-for-money adjustment – otherwise, the 250 "free" bottom points have the effect of just catapulting the less affluent countries to the top of the list.

The score thus obtained has been multiplied by the arithmetic means of all 26 square roots (creating the effect that scores are normalized back to the same numerical value range as the original scores).

7.2 Results in the BFB Score sheet

The outcome of the BFB exercise is shown in the table below. Even with the square root exercise described in the previous section, the effect is definitely to dramatically elevate all the less affluent nations in the scoring sheet.

DED 1: 4 1	G 4
BFB-adjusted	Country
1	Slovenia
2	Estonia
3	Hungary
4	Poland
5	Sweden
6	Netherlands
7	France
8	Finland
9	Germany
10	Austria
11	Latvia
12	Cyprus
13	Malta
14	Switzerland
15	Luxemburg
16	Slovakia
17	Italy
18	Portugal
19	Denmark
20	Belgium
21	Spain
22	United Kingdom
23	Czech Republic
24	Greece
25	Lithuania
26	Ireland

What the author finds interesting is to see which countries top the list in the BFB Scores, and *also* do reasonably well in the original scores. Examples of such countries are Sweden, the Netherlands, France, Finland, Germany and Austria.

The BFB scores, naturally, are to be regarded as somewhat of an academic exercise. Not least the method of adjusting to the square root of healthcare spend certainly lacks scientific support. After the EHCI research work, however, it does seem that at least the two top countries in the BFB score, Slovenia and Estonia, are doing very well within their financial capacity.

8. Comments from International Expert Panel members

"The Euro Health Consumer Index 2006 continues to be transparent and the best and most comprehensive tool of its type. The selection categories are more clearly defined and refined. The data is becoming fuller and better. Overall there is a real improvement in quality as a useful tool for policy makers and both consumers and healthcare providers." (Tom Kass)

"Comparing healthcare systems of different countries is very interesting. The process can help to learn about differences and similarities and understand the own health system better. The perspective of the patient has so far been very often neglected so the EuroHealthConsumer Index fills a gap. To make it more useful it might be helpful to have even more in mind that patients are not only consumers.

There are patients who have no choice either because there are chronically ill, have a disability or are poor.

"The indicators are necessary for a comparison. However they imply an objectivity that does not exist. Hence not only the results of the Health Consumer Index are interesting but maybe even more a discussion on the input in the system, *e.g.* the reason why one indicator may be more useful than another." (Katrin Grüber)

9. This is how the EHCI 2006 was built

9.1 Strategy

In April 2004 we first launched the Swedish Health Consumer Index (www.vardkonsumentindex.se, also in a translation to English). By ranking the 21 county councils (the regional parliaments responsible for funding, purchasing and generally also providing healthcare) by 12 basic indicators concerning the design of "systems policy", consumer choice, service level and access to information, we introduced benchmarking as an element in consumer empowerment. The presentation of the third annual update of the Swedish index on May 16, 2006 again confirmed to Swedes the low average ranking of most councils revealing the still weak consumer position.

There is a pronounced need for improvement. The very strong media impact of the Index all over Sweden confirmed that the image of healthcare is rapidly moving from rationed public goods into consumer-related services measurable by common quality perspectives,

For the Euro Health Consumer Index, the Health Consumer Powerhouse has been aiming to follow basically the same approach, *i.e.* selecting a number of indicators describing to what extent the national healthcare systems are "user-friendly", thus providing a basis for comparing different national systems.

The Index does not take into account whether a national healthcare system is publicly or privately funded and/or operated. The purpose of the EHCI is health consumer empowerment, not the promotion of political ideology. Aiming for dialogue and cooperation, the ambition of HCP is to be looked upon as a partner in developing healthcare around Europe.

In the initial years of index building, opinions brokers and policy makers -- like journalists, experts and politicians -- will be the key targets for the Index. Gradually, the health consumer could become main users as well as service providers, payors and authorities. Such a development will ask for user-friendly services and a deep knowledge of consumer values. Interactivity with users and others parts of the European healthcare society will be another key characteristic.

9.2 Main content Euro Health Consumer Index 2006

9.2.1 Preliminary selection of indicator areas for study

The aim has been to select a limited number of indicators, within a definite number of evaluation areas, which taken together can present a telling tale of how the healthcare consumer is being served by the respective systems. The work started with a "long-list" of indicator areas as given below:

Information to the healthcare consumer

- 1. Is there a national healthcare information service, which fulfils requirements x, y and z?
- 2. Is there a publicly available description of healthcare providers, with indicators of result and outcomes?
- 3. Are patient/consumer rights clearly defined and easily accessible?

Treatment accessibility

- 1. Waiting times for a representative selection of treatments (measured how?)
- 2. Can doctor appointments be struck conveniently?
- 3. Can prescriptions be renewed over the Internet?
- 4. Accessibility of a selection of best practice-therapies (operations, tests, drugs)? Or: What is the official policy in these respects (red tape etcetera)?

Medical standards and safety

- 1. Maltreatment frequencies (MRSA in hospitals, etcetera.)
- 2. Mortality for conditions where the performance of healthcare services are essential for the outcome (*i.e.* not lifestyle-dependent)

"System information"

- 1. Patient rights (comprehensive and available?)
- 2. Provider listings (complete, convenient?)
- 3. Procedure for filing a complaint (are there meaningful and established channels, or: Is there information on how to proceed?)
- 4. Are regular citizen/consumer polls on healthcare quality/accessibility/satisfaction made (by whom, at what level)?

"Legal position"

- 1. Funding alternatives; "opt-out" options?
- 2. Patient access to medical records (national byelaws?)
- 3. Patient choice of caregiver (level?)
- 4. Right and procedure for appeal (of what decisions?)
- 5. Compensation for maltreatment (cancellations and/or maltreatment)

"Risk information" (can patients access information about):

- 1. MRSA in a certain hospital?
- 2. Maltreatment statistics of hospitals (how?)
- 3. State of the art/best practice-treatment in various hospitals (three representative diagnoses)?
- 4. Substandard treatments (certain diagnoses/methods; measured how)?

Service/attention

- 1. Can patients book appointments by e-mail (offered by >x % of caregivers)
- 2. Prescription renewal -"-
- 3. Prescription validity (time)?
- 4. Single room in hospital (extra charge)?
- 5. Healthcare information service (level, telephone, and web)?

Accessibility

- 1. Waiting times for treatment (three representative diagnoses)?
- 2. Time lapse/policy for introduction of new drugs (definition European Observatory?)?
- 3. Pharmacy shop hours
- 4. Accessibility to family doctor/equivalent (level; several variables)

Provision levels "Generosity" (What and/or how much is included in the public healthcare services)

- 1. Operation rates per 100 000 citizens for conditions, with reasonably uniform prevalence, and which are not merely a measure on GDP/capita. Hip joint replacements (an expensive but not life-saving operation) were excluded for this reason.
- 2. Are eyeglasses or dental care parts of the public offering?
- 3. If a state has very high proportion of healthcare being paid for out-of-pocket, scores in this sub discipline should be reduced down from what official statistics on these parameters would give (Cyprus being the prime example).

9.3 Production phases

EHCI 2006 was constructed under the following project plan:

9.3.1 Phase 1

Mapping of existing data

Initially, the major area of activity was to evaluate to what extent relevant information is available and accessible for the selected countries. The basic methods were:

Web search

Telephone and e-mail interviews with key individuals

Personal visits when required

Web search:

- a) Relevant byelaws and policy documents
- b) Actual outcome data in relation to policies

Information providers:

a) National and regional Health Authorities

- b) Institutions (EHMA, Cochrane Institute, Picker Institute, University of York Health Economics, others)
- c) Patient associations ("What would you really like to know?")
- d) Private enterprise (IMS Health, pharmaceutical industry, others)

Interviews (to evaluate findings from earlier sources, particularly to verify the real outcomes of policy decisions):

- a) Phone and e-mail
- b) Personal visits to key information providers

9.3.2 Phase 2

Data collection and Panel recruitment

- Data collection be undertaken to assemble presently available information to be included in the EHCI.
- Identification of vital areas, where additional information needed to be assembled was performed.
- Collection of raw data for these areas

Two informal Euro Health Panels were recruited, one International Panel and one Swedish Panel. The two panels met at two sittings each, the Panel Members having been sent the EHCI 2006 working sheets in advance. The following persons have taken part in the International Panel Work:

Name	Affiliation
Laura Aiuppa	Director Special Projects, NCQA,
	Washington DC, USA
Dr. Katrin Grüber	Institutsleiterin , Institut Mensch, Ethik
	und Wissenschaft, Berlin, Germany
Tom Kass	Senior Vice President , EFG Private Bank
	SA,
	Zürich, Switzerland
Dr. Meni Malliori	Ass. Professor of Psychiatry, Athens,
	Greece
Caroline Powell	Deputy Chief Executive, Picker Institute
	Europe,
	Oxford, UK

The Swedish panel has had the following persons participate in the work:

Name	Affiliation
Johan Calltorp, MD, Professor of Healthcare Administration	Association of Swedish Counties and Municipalities
Stig Nyman	Councillor, Stockholm County Council
Anne-Marie Pernulf, MD	Head of Oncology Division, Academic Hospital, Uppsala
William Thorburn, MD	Chief Medical Officer of the University Hopital of Northern Sweden (retired), Umeå
Elisabet Wennlund	Chief Medical Officer, St. Göran's Hospital, Stockholm

The HCP wishes to extend its sincere thanks to the members of both panels for very valuable contributions and discussions.

Experience from the three consecutive annual Swedish Health Consumer Index editions has been evaluated and applied when designing the EHCI.

9.3.3 Phase 3

- EHCI construction
- Web solution building

Preliminary assembly of first set of evaluation parameters

Building website for EHCI accessibility

A round of personal visits by the EHCI project manager to Health Ministries and/or State Agencies for supervision and/or Quality Assurance of Healthcare Services. The HCP especially wishes to thank our contact persons in Cyprus, Estonia, Finland, Hungary, Latvia, Malta, the Netherlands, Poland, Portugal and Slovenia for very valuable cooperation on data acquisition and validation.

Consulting European patient advocates and citizens through HCP surveys, performed by external research facilities (Patient View, SCB (Sweden).

9.3.4 Phase 4

Project presentation and reports

• Presentation of EHCI 2006 at Health Consumer Summit

• A report describing the principles of how the EHCI is constructed

On-line launch on www.healthpowerhouse.com.

10. European data shortage

There is one predominant feature, which characterizes European public healthcare (and other welfare state), systems as opposed to their more industrialised counterparts in countries such as the U.S.A.: there is an abundance of statistics on input of resources, but a traditional scarcity of data on quantitative or qualitative *output*.

Organisations like the WHO and OECD are publishing easily accessible and frequently updated statistics on topics like:

- the number of doctors/nurses per capita
- hospital beds per capita
- share of patients receiving certain treatments
- number of consultations per capita
- number of MR units per million of population
- health expenditure by sources of funds
- drug sales in doses and monetary value (endless tables)

Systems with a history of funding structures based on grant schemes and global budgeting often exhibit a management culture, where monitoring and follow-up is more or less entirely focused on input factors. Such factors can be staff numbers, costs of all kinds (though not usually put in relation to output factors) and other factors of the nature illustrated by the above bullet list.

Healthcare systems operating more on an industrial basis have a natural inclination to focus monitoring on *output*, and also much more naturally relate measurements of costs to output factors in order to measure productivity, cost-effectiveness and quality.

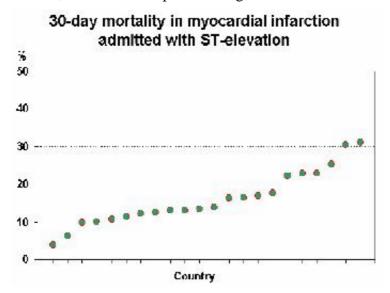
The EHCI project has endeavoured to obtain data on the quality of actual healthcare provided. Doing this, the ambition has been to concentrate on indicators, where the contribution of actual healthcare provision is the main factor, and external factors such as lifestyle, food, alcohol or smoking are not heavily interfering. Thus, the EHCI has also avoided including public health parameters, which often tend to be less influenced by healthcare performance than by external factors.

The chosen quality indicators became:

Heart infarct mortality <28 days after hospitalisation (de-selecting such parameters as total heart disease mortality, where the Mediterranean states have an inherent, presumably life-style dependent, leading position).

The data used were those from the so-called Monica study, completed with data obtained directly from healthcare authorities of countries not part of Monica.

There are more complete European data. However, as is the case for several areas of medical quality data for disease outcomes/results of healthcare, access to such data is confined to the ranks of the medical speciality associations. The graph shown below is in its original form from material published by the European Society of Cardiology, with the identities of countries not given. In spite of asking through experienced, well-respected academics, it has not been possible to gain access to the country identities.



Infant mortality/1000 live births (presumed to be to a large degree dependent on the quality of healthcare services)

Breast & colon cancer mortalities, arithmetic mean. Survival rates for these cancer forms are largely dependent on early detection and quality of care

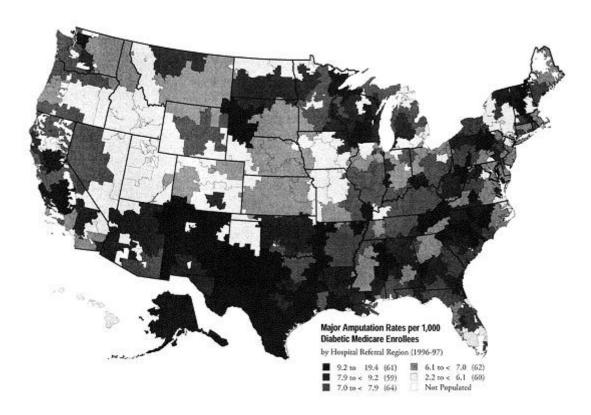
MRSA infections; EARSS statistics - for patients, who get a Hospital Acquired Infection; what % of these cases is infected by bacteria which are resistant to conventional treatment with antibiotics? This is probably the medical quality indicator, which has the most systematic follow-up and reporting in public form in European healthcare. Unfortunately, Switzerland does not report to EARSS.

Potential years of life lost (PYLL).

For QA on the total diabetes care, the OECD work mentioned in the following section has suggested "% of diabetics with elevated HbA1c levels". This project would have dearly liked to include this parameter, but as the data are not yet good enough for comparison between countries, the few data available have been included outside of competition.

Diabetes complication data are readily available for the USA, as is shown in the following graph. After intensive research and interviews to find similar European

statistics, several experienced medical researchers in different European countries confirmed that reliable statistics for Europe in fact do not exist in readily available form.



Wrobel et al., American Journal of Public Health 24(5), 860

We sincerely want to wish the national healthcare authorities, the EU DG5, the WHO, the OECD and the medical specialist associations the best of success in their ongoing efforts to provide good quality statistics on the performance of healthcare systems. The better data coverage, the more optimistic you can be regarding the potential access by consumer to important information, eventually building knowledge to manoeuvre the healthcare systems optimizing the outcomes for the individual.

10.1 The OECD Healthcare Quality Indicators Project

The Healthcare Quality Indicators Project released their Initial Indicators Report (Edward Kelley and Jeremy Hurst) in March 2006. This project was guided by an expert group made up of representatives from OECD countries participating in the project. Presently, this group includes representatives from 23 countries.

The indicators recommended by this project for retention in an initial HCQI indicator set are listed below.

- Breast Cancer Survival
- Mammography Screening
- Cervical Cancer Survival
- Cervical Cancer Screening
- Colorectal Cancer Survival
- Incidence of Vaccine Preventable Diseases
- Coverage for basic vaccination
- Asthma mortality rate
- AMI 30-day case fatality rate
- Stroke 30-day case fatality rate
- Waiting time for femur fracture surgery
- Influenza vaccination for adults over 65
- Smoking rates

Data on HbA1c levels were included in the March 2006 report, but were presented to illustrate comparability issues and are not currently appropriate for use in cross-country comparisons. This indicator has been included in the EHCI. It is included outside of the total scoring for the above reason.

The HCP enthusiastically welcomes this project, and we sincerely wish it great success.

11. How to interpret the Index results?

The first and most important consideration on how to treat the results is: "With great care and restrictions for drastic conclusions!"

The EHCI 2006 is an attempt at measuring and ranking the performance of healthcare systems from a consumer viewpoint. The results definitely contain information quality problems. There is a shortage of pan-European; uniform set procedures for data gathering.

But again, we find it far better to present our outcomes to a public, and to promote constructive discussion rather than staying with the only too common opinion that as long as healthcare information is not a hundred percent complete you had better keep it in the closet. Again we want to stress that the Index displays consumer information, not medically or individually sensitive data.

11.1 Compatibility with similar study

As one measure of the connection between EHCI results and reality, we would like to introduce a comparison between the EHCI ranking, and that found in the "Inequality in responsiveness" ranking provided by the European Observatory¹. Based on population surveys, that ranking is:

- 1. Germany
- 2. the Netherlands
- 3. France
- 4. Belgium
- 5. Finland
- 6. United Kingdom
- 7. Spain
- 8. Ireland
- 9. Luxembourg
- 10. Sweden
- 11. Italy
- 12. Portugal
- 13. Greece

The correlation between that study and the EHCI 2005 and 2006 is fairly good – the main reason for Belgium scoring worse and Sweden scoring better in the EHCI is the inclusion of outcomes quality indicators.

While by no means claiming that the EHCI 2006 results are dissertation quality, the findings should not be dismissed as random findings. On the contrary, the Swedish experience reflects that consumer ranking by similar indicators is looked upon as an important tool to display healthcare service quality. We hope that the Euro Health Consumer Index results can serve as inspiration for where European healthcare systems can be improved.

¹ Social Health Insurance Systems in Western Europe, European Observatory on Health Systems and Policies (2004), page 97.

12. References

12.1 Main sources

The main sources of input for the various indicators are given in Table 5.4 above. For all indicators, this information has been supplemented by interviews and discussions with healthcare officials in both the public and private sectors.

12.2 Useful links

Web search exercises have yielded useful complementary information from, among others, these websites:

http://www.aesgp.be/

http://www.wrongdiagnosis.com/a/amputation/stats-country_printer.htm

http://www.easd.org/

http://www.diabetes-journal-online.de/index.php?id=1

http://www.drfoster.co.uk/

http://www.rivm.nl/earss/

http://www.eudental.org/index.php?ID=2746

http://europa.eu/abc/governments/index en.htm

http://europa.eu/pol/health/index_en.htm

http://ec.europa.eu/public_opinion/index_en.htm

http://europa.eu.int/youreurope/index_sv.html

http://www.eurocare.it/

http://www.ehnheart.org/content/default.asp

http://www.euro.who.int/observatory

http://www.escardio.org/

http://epp.eurostat.cec.eu.int/portal/page?_pageid=1090,30070682,1090_33076576&_dad=portal&_schema=PORTAL

http://ec.europa.eu/health-eu/index_en.htm

<u>http://www.who.dk/eprise/main/WHO/AboutWHO/About/MH#LVA</u> (Health Ministries of Europe addresses)

http://www.hospitalcompare.hhs.gov/

http://www.hope.be/

http://www.activemag.co.uk/hhe/error.asp?m=2&productcode=&ptid=3&pid=2&pgid=3 4&spid= (Hospital Healthcare Europe)

http://www.idf.org/home/

http://www.eatlas.idf.org/

http://www.hospitalmanagement.net/

http://www.lsic.lt/html/en/lhic.htm (Lithuanian Health Info Centre)

http://www.lse.ac.uk/collections/LSEHealthAndSocialCare/

http://www.medscape.com/businessmedicine

http://www.oecdbookshop.org/oecd/display.asp?TAG=XK4VX8XX598X398888IX8V&CID=&LANG=EN&SF1=DI&ST1=5LH0L0PQZ5WK#OtherLanguages (OECD Health Data 2005)

http://www.oecd.org/department/0,2688,en_2649_33929_1_1_1_1_1_1,00.html (OECD Health Policy & Data Department)

http://www.painineurope.com/user_site/index.cfm?item_id=1241918

http://www.medscape.com/medline/abstract/15176130 (Patient Ombudsmen in Europe)

http://home.online.no/~wkeim/patients.htm#liste (Patients' Rights Laws in Europe)

http://www.patient-view.com/hscnetwork.htm

http://www.people-logistics.com/index.html

http://www.pickereurope.org/

http://www.vlada.si/index.php?gr1=min&gr2=minMzd&gr3=&gr4=&id=&lng=eng (Slovenia Health Ministry

http://www.lmi.no/tf/2004/Engelsk/Chapter%206/6.20.htm (Tall og fakta)

http://www.100tophospitals.com/

http://www.worldcongress.com/presentations/?confCOde=NW615

http://www.who.int/healthinfo/statistics/mortestimatesofdeathbycause/en/index.html

http://www.who.int/topics/en/

http://www.who.int/healthinfo/statistics/mortdata/en/

http://www.euro.who.int/hfadb (WHO Health for All database)

http://www.who.dk/healthinfo/FocalPoints (addresses to Health Statistics contacts in Europe)

http://www.who.int/genomics/public/patientrights/en/

http://www.waml.ws/home.asp (World Assn. of Medical Law)

http://www.wrongdiagnosis.com/risk/geography.htm

13. About the Health Consumer Powerhouse

Health Consumer Powerhouse is the leading European provider of consumer information on health care. The Powerhouse is dedicating ideas and resources to the development of

consumer empowerment action. We analyse health care and compare the outcomes, designing consumer information tools like health care system and Illnesses indexes, consumer press and education.

We are driven by the insight that Europeans will move from weak patients to powerful consumers. This process requires more than just legal rights of choice between providers or the option of going abroad, accompanied by public funding, for necessary treatment. Such opportunities will be of limited value while patients have yet to learn how to navigate the care system, how to appraise the service provider and how to act as health consumers.

Today we work towards consumer empowerment by developing health consumer information services:

- EuroHealth Consumer Index (2005 and 2006)
- Swedish Health Consumer Index (2004, 2005 and 2006)
- Canadian Health Consumer Index (to be launched 2007)
- Breast Cancer Index (2006)
- Diabetes Index (2006)
- Din Vård magazine on health consumerism
- Health Consumer Development We prepare for launching a platform for education and training of consumers and organisations (autumn of 2006)

The Health Consumer Powerhouse customers pay for the services we offer. The Powerhouse holds the intellectual property rights but we are happy to share the outcomes of our work with stakeholders and consumers. Our corporate policy makes clear though that we cannot accept business relations questioning our independence and credibility.

The Health Consumer Powerhouse is an initiative by Mr Johan Hjertqvist, the international health policy reformist and entrepreneur of ideas.

We are a registered Swedish entity working from Stockholm and Brussels and soon also in Canada.