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Euro-Canada Health Consumer Index 2009

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and Arne Björnberg, Ph.D.

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Health Consumer Powerhouse

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Table of Contents

Canadian healthcare: another lost year

In 2008 the Health Consumer Powerhouse (HCP) and the Frontier Centre for Public Policy presented the first Euro-Canada Health Consumer Index. This marked the induction of Canada into a comprehensive benchmarking exercise that analyzes the consumer responsiveness among 29 national European healthcare systems.

The Euro-Canada Health Consumer Index (ECHCI) was an alarm bell, as it showed that Canada was placed in the bottom quarter of the Index – though it spent more money to achieve worse results than a large number of European competitors. In specific:

- Canadians suffer from a healthcare system officially based on equity and solidarity – but in reality it is a sub-standard one that denies Canadian healthcare consumers many of the services taken for granted in Europe;
- Patient rights, access to information, and choice and services without delay are underdeveloped in Canada and deliver low value for the money spent;
- The positive part of the comparison is that the *quality* of treatment – when delivered – puts Canada on par with most European countries.

The authors believe in the power of benchmarks. The lesson from the HCP's five years of healthcare benchmarking is that comparisons count. Weak or excellent performances among the national healthcare systems are highlighted as good examples. But to serve the intended purpose, stakeholders must take action when the alarm bell rings.

The 2008 Index caused a stir within Canada. But that is far from enough. Governments, patients and consumers now have a better foundation for taking action. This year's Index will provide additional fuel for that fire as it confirms the poor cross-Atlantic position of Canada; 2008 evidently was no isolated poor score on Canada's part.

Canada can ill-afford another lost year without closing the gap and the question remains: why should Canadians be satisfied with a level of (poor) care that is becoming outdated in Europe?

Brussels, Ottawa, Winnipeg

May, 2009

Johan Hjertqvist, President,
Health Consumer Powerhouse,
Brussels/Stockholm, Sweden

Peter Holle, President,
Frontier Centre for Public Policy,
Winnipeg, MB Canada

1. Executive Summary

In this second annual Euro-Canada Health Consumer Index (ECHCI), Canada ends up in 23rd place. This year's winner, the Netherlands, scores 824 points out of 1,000 edging out runner-up and last year's winner, Austria, by a margin of eleven points. Luxembourg and Denmark take third and fourth place with 795 and 794 points, respectively.

In terms of medical outcomes, Canada compares reasonably well with the best performing healthcare systems and on the generosity scale Canada collects an average score. With respect to patient rights, waiting times and availability of pharmaceuticals Canada places at the absolute bottom in the rankings.

Estonia prevails in the value-for-money-adjusted Bang-for-the-Buck index, while placing 11th overall in the ECHCI Index and competing very well with countries spending vastly more per capita on healthcare. Taken together – Canada's poor overall performance in the Index along with a high expenditure on healthcare services – leads to Canada's last-place ranking in the Bang-for-the-Buck index.

2. Introduction

The Health Consumer Powerhouse (HCP) is a centre for visionary thinking and action-promoting consumer-related healthcare in Europe. HCP declares that "Tomorrow's health consumer will not accept any traditional borders." In order to become a powerful actor, and to build the necessary reform pressure from below, the consumer needs access to knowledge in order to compare health policies, consumer services and quality outcomes. In the 2009 Euro-Canada Index, Canada's Frontier Centre for Public Policy (FCPP), together with HCP, continues its commitment to evaluate health policy across Canada. All the European countries included in the Index share Canada's commitment to accessible and effective healthcare. By comparing the performance of Canada's healthcare system with the extremely varied systems in Europe, we can gain much insight into how Canada is succeeding and how it can improve.

2.1 Background

Since 2004 HCP has published a wide range of comparative publications on healthcare in various countries. Starting with the Swedish Health Consumer Index in 2004, HCP now has a series of annual publications including the Euro Consumer Health Index, the Euro Consumer Heart Index and the Euro Consumer Diabetes Index. As of 2008, HCP in collaboration with FCPP also publishes the Euro-Canada Health Consumer Index and the Canada Health Consumer Index.

Though it is still a somewhat controversial position, HCP advocates that quality comparisons within the field of healthcare are a win-win situation. For the consumer, better information will create a better platform for informed choice and action. For governments, authorities and providers, the sharpened focus on consumer satisfaction and quality outcomes will help to support change whether as applied to evidence of shortcomings or method flaws; the index also illustrates the potential for improvement. With such a view, the ECHCI is designed to become an important benchmark that supports interactive assessment and improvement.

2.2 About the Authors

Daniel Eriksson (M.Sc.), for the Frontier Centre for Public Policy, is the lead researcher for the Canadian component of the Euro-Canada Health Consumer Index 2009. Mr. Eriksson wrote his thesis on product introduction on the healthcare market and received his master's degree in Industrial Engineering and Management from Linköping University, Sweden. He also attended classes at the Asper School of Business, Winnipeg.

The project management function of the Euro-Canada Health Consumer Index 2009 was carried out 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 – 2008 projects.

2.3 Countries Involved

Last year the ECHCI already included all 27 European Union member states as well as Norway and Switzerland. This year, Croatia and FYR Macedonia expand the Index to include a total of 32 candidate countries, including Canada.

Countries included in Euro-Canada Health Consumer Index 2009:

- Austria
- Belgium
- Bulgaria
- Canada
- Croatia
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- FYR Macedonia
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Norway
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- Switzerland
- United Kingdom

3. Results of the Euro-Canada Health Consumer Index 2009

Euro-Canada Health Consumer Index 2009

Sub-discipline	Indicator	Canada	Austria	Belgium	Bulgaria	Croatia	Cyprus	Czech Republic	Denmark	Estonia	Finland	France	FYR Macedonia	Germany	Greece	Hungary	Ireland	Italy
1. Patient rights and information	1.1. Healthcare law based on patients' rights	○	◑	●	○	●	●	○	●	●	●	●	●	○	●	●	○	◑
	1.2. Patient organizations involved in decision making	◑	○	●	○	◑	◑	◑	◑	●	◑	◑	◑	●	◑	●	◑	◑
	1.3. No-fault malpractice insurance	○	○	○	○	○	○	○	●	○	●	◑	○	○	○	○	○	○
	1.4. Right to second opinion	○	●	●	◑	◑	○	◑	●	●	◑	●	◑	●	◑	●	◑	◑
	1.5. Access to own medical record	◑	●	◑	●	●	◑	●	●	◑	●	◑	●	●	◑	●	◑	◑
	1.6. Register of legit doctors	◑	●	○	◑	◑	◑	◑	●	●	●	●	○	◑	◑	●	●	●
	1.7. Web or 24/7 telephone healthcare information	●	○	○	○	○	○	○	●	●	●	○	○	◑	○	○	◑	○
	1.8. Provider catalogue with quality ranking	○	○	○	○	○	◑	○	●	○	○	◑	○	○	○	◑	○	○
	1.9. e-Health proficiency	○	◑	◑	◑	n.a.	◑	◑	●	◑	●	◑	◑	◑	○	◑	◑	◑
	1.10. Cross-border care information	○	◑	●	●	n.a.	◑	○	●	◑	◑	◑	n.a.	○	●	◑	○	●
	Sub-discipline weighted score	75	95	100	85	85	90	80	145	115	125	110	85	95	90	115	85	95
2. Waiting times for treatment	2.1. Family doctor same day access	○	●	●	●	●	◑	●	●	◑	○	◑	●	●	○	◑	◑	◑
	2.2. Direct access to specialist	○	●	●	○	○	●	●	○	○	○	◑	○	●	●	◑	○	◑
	2.3. Major non-acute operations < 90 days	○	◑	●	◑	n.a.	○	◑	◑	◑	○	◑	n.a.	●	◑	◑	●	◑
	2.4. Cancer therapies < 21 days	○	◑	●	◑	n.a.	◑	◑	◑	●	◑	●	n.a.	●	◑	●	○	◑
	2.5. MRI examinations < 7 days	○	●	○	◑	n.a.	○	○	○	●	○	○	○	◑	◑	●	○	○
	Sub-discipline weighted score	83	217	217	167	117	150	183	150	183	100	167	117	233	167	200	133	150
3. Outcomes	3.1. Heart infarct case fatality	◑	◑	◑	◑	n.a.	◑	◑	◑	◑	◑	●	n.a.	◑	◑	○	◑	◑
	3.2. Infant deaths	◑	●	◑	○	◑	●	●	●	◑	●	●	○	●	●	◑	●	●
	3.3. Cancer 5-year survival	◑	●	◑	○	◑	n.a.	○	◑	○	◑	●	◑	◑	○	○	◑	◑
	3.4. Avoidable deaths – years of life lost	◑	●	◑	○	○	●	◑	◑	○	◑	◑	○	●	●	○	●	●
	3.5. MRSA infections	◑	◑	○	◑	○	○	◑	●	◑	●	○	○	○	○	○	○	○
	3.6 Rate of decline of suicide	●	●	○	◑	◑	n.a.	◑	●	●	●	◑	◑	●	◑	●	◑	◑
	3.7. Percentage of patients with high HbA1c levels (> 7)	●	○	○	n.a	n.a.	○	●	●	○	●	◑	n.a.	◑	●	◑	●	●
	Sub-discipline weighted score	229	243	157	129	143	171	214	257	171	257	229	129	229	214	157	229	229
4. Range and reach of services provided	4.1. Cataract operations	●	◑	●	○	○	○	○	◑	◑	◑	◑	n.a.	◑	◑	●	○	●
	4.2. Infant 4-disease vaccination	○	○	●	◑	◑	◑	●	◑	◑	●	●	◑	◑	○	●	○	◑
	4.3. Kidney transplants	◑	●	◑	○	○	n.a.	◑	◑	●	●	●	n.a.	◑	○	◑	◑	○
	4.4. Dental care affordability	○	●	●	○	●	○	●	●	○	◑	○	●	◑	○	○	◑	◑
	4.5. Mammography reach	◑	◑	◑	n.a.	○	n.a.	○	◑	○	●	◑	n.a.	○	◑	○	◑	◑
	4.6. Informal payments to doctors	●	◑	●	○	○	●	○	●	◑	●	◑	○	●	○	○	●	◑
	Sub-discipline weighted score	100	108	133	58	75	75	92	117	92	133	108	75	100	67	92	92	100
5. Pharmaceuticals	5.1. Rx subsidy	○	●	◑	○	n.a.	○	◑	◑	○	○	●	n.a.	●	◑	◑	●	●
	5.2. Layman-adapted pharmacopeia	○	●	○	○	n.a.	○	●	●	●	◑	◑	n.a.	○	○	●	◑	○
	5.3. New cancer drugs deployment speed	◑	●	◑	○	n.a.	◑	○	◑	◑	◑	◑	n.a.	◑	◑	○	◑	◑
	5.4. Access to new drugs (time to subsidy)	○	●	○	○	n.a.	●	◑	●	●	◑	○	n.a.	●	◑	○	●	○
	Sub-discipline weighted score	63	150	75	50	50	88	100	125	113	88	100	50	113	88	88	125	88
	Total score	549	813	682	489	470	574	669	794	674	703	714	455	769	625	651	664	661
	Rank	23	2	11	29	30	21	13	4	12	9	8	32	5	18	16	14	15

Euro-Canada Health Consumer Index 2009

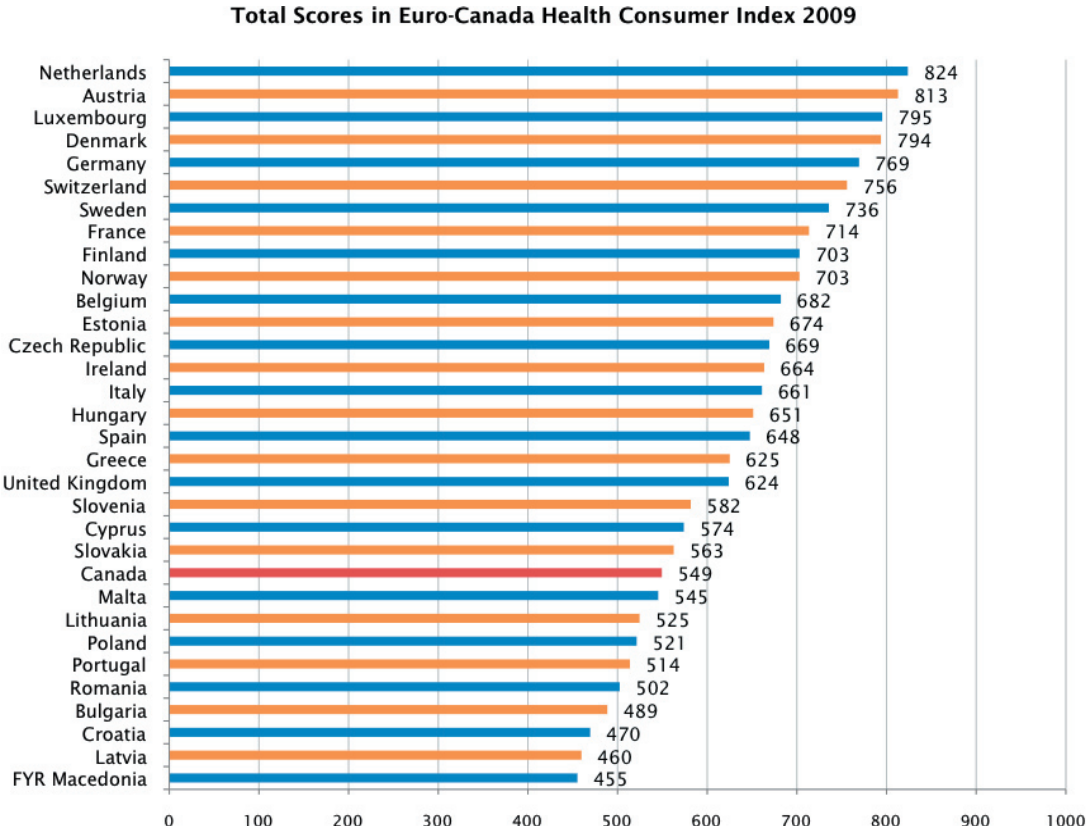
Sub-discipline	Indicator	Canada	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Norway	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	Switzerland	United Kingdom
1. Patient rights and information	1.1. Healthcare law based on patients' rights	○	○	●	○	○	●	●	◑	◑	◑	●	●	●	○	●	◑
	1.2. Patient organizations involved in decision making	◑	○	●	◑	○	●	◑	●	○	○	●	◑	○	◑	◑	◑
	1.3. No-fault malpractice insurance	○	○	◑	○	○	○	●	○	○	○	○	●	○	●	○	○
	1.4. Right to second opinion	○	○	●	●	●	●	◑	◑	○	●	◑	●	◑	◑	●	◑
	1.5. Access to own medical record	◑	◑	●	●	○	●	●	●	○	○	◑	●	○	●	●	◑
	1.6. Register of legit doctors	◑	○	●	●	●	●	○	○	○	○	○	◑	○	○	○	◑
	1.7. Web or 24/7 telephone healthcare information	●	○	○	○	◑	◑	◑	○	◑	○	◑	○	○	●	◑	●
	1.8. Provider catalogue with quality ranking	○	○	○	○	○	◑	◑	○	○	○	○	◑	○	○	○	●
	1.9. e-Health proficiency	○	○	○	◑	◑	●	●	○	◑	○	◑	◑	◑	●	●	●
	1.10. Cross-border care information	○	○	●	●	●	◑	n.a.	◑	○	●	○	◑	◑	○	n.a.	○
	Sub-discipline weighted score	75	55	115	100	90	125	110	85	65	75	90	115	75	100	100	105
2. Waiting times for treatment	2.1. Family doctor same day access	○	○	◑	●	●	◑	◑	◑	○	●	●	○	◑	○	◑	◑
	2.2. Direct access to specialist	○	○	◑	●	○	○	○	◑	○	◑	○	○	○	○	●	○
	2.3. Major non-acute operations < 90 days	○	○	◑	●	○	◑	◑	○	○	◑	○	◑	○	○	●	○
	2.4. Cancer therapies < 21 days	○	○	◑	●	◑	●	◑	◑	◑	◑	●	○	◑	◑	●	◑
	2.5. MRI examinations < 7 days	○	○	○	◑	○	◑	○	○	○	●	◑	○	○	○	●	○
	Sub-discipline weighted score	83	83	150	233	133	167	133	133	100	200	167	100	117	100	233	117
3. Outcomes	3.1. Heart infarct case fatality	◑	○	◑	●	◑	●	●	●	○	○	○	◑	●	●	●	◑
	3.2. Infant deaths	◑	○	◑	●	◑	◑	●	◑	●	○	○	●	●	●	◑	◑
	3.3. Cancer 5-year survival	◑	○	◑	◑	◑	◑	◑	○	◑	○	○	◑	◑	●	●	○
	3.4. Avoidable deaths – years of life lost	◑	○	○	●	◑	●	●	○	◑	○	○	◑	●	●	●	◑
	3.5. MRSA infections	◑	◑	○	○	○	●	●	◑	○	○	◑	◑	○	●	◑	○
	3.6 Rate of decline of suicide	●	●	○	◑	○	◑	◑	○	◑	○	◑	◑	◑	◑	◑	◑
	3.7. Percentage of patients with high HbA1c levels (> 7)	●	●	○	◑	n.a	●	○	○	n.a	n.a	n.a	○	○	●	n.a	●
	Sub-discipline weighted score	229	171	143	229	143	257	243	157	157	86	114	200	214	286	214	186
4. Range and reach of services provided	4.1. Cataract operations	●	○	○	●	◑	●	◑	○	○	○	○	◑	●	◑	○	◑
	4.2. Infant 4-disease vaccination	○	●	◑	●	○	●	◑	●	◑	●	●	●	●	●	◑	◑
	4.3. Kidney transplants	◑	◑	○	◑	◑	●	●	○	◑	○	○	○	●	●	◑	◑
	4.4. Dental care affordability	○	●	◑	●	●	●	n.a.	●	○	○	●	◑	○	○	n.a.	●
	4.5. Mammography reach	◑	○	n.a.	●	n.a.	●	●	○	◑	n.a.	○	○	○	●	○	◑
	4.6. Informal payments to doctors	●	◑	○	◑	◑	●	●	○	●	○	◑	◑	●	●	●	●
	Sub-discipline weighted score	100	100	67	133	92	150	117	83	92	67	92	92	117	125	83	117
5. Pharmaceuticals	5.1. Rx subsidy	○	○	○	●	◑	●	◑	◑	◑	○	●	●	●	◑	●	●
	5.2. Layman-adapted pharmacopeia	○	○	○	○	●	●	◑	○	◑	●	●	○	◑	●	○	○
	5.3. New cancer drugs deployment speed	◑	○	○	●	○	◑	○	○	◑	○	○	○	●	◑	●	○
	5.4. Access to new drugs (time to subsidy)	○	○	○	○	○	◑	●	○	◑	○	○	○	◑	●	●	●
	Sub-discipline weighted score	63	50	50	100	88	125	100	63	100	75	100	75	125	125	125	100
	Total score	549	460	525	795	545	824	703	521	514	502	563	582	648	736	756	624
	Rank	23	31	25	3	24	1	10	26	27	28	22	20	17	7	6	19

3.1 Results Summary

This second attempt at creating a comparative index for the Canadian and the European national healthcare systems confirms that there is a group of EU member states that all have good healthcare systems as seen from the customer/consumer's point of view. The scoring was 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 great efforts should not be spent on in-depth analysis of why one country is in 11th place, and another in 14th. Very subtle changes in single scores can modify the internal order of countries.

In the ECHCI 2009 the Netherlands ranks first among the 32 participating countries, scoring 824 points out of 1,000. Last year's winner, Austria, claims the second spot with 813 points, ahead of Luxemburg and Denmark with 795 and 794 points, respectively. Meanwhile, Canada maintains its 23rd position from last year's Euro-Canada Index.

The ECHCI winner, the Netherlands, has consistently been at the top in the total ranking of all Health Consumer Powerhouse indexes published since 2005. The Dutch healthcare system does not seem to have any real weak spots in the five sub-disciplines of the Index except possibly for waiting times where some other European countries excel, including runner-ups Austria and Luxembourg. Denmark, in fourth place, has continually risen since it was first included in the EHCI in 2006. It would seem that the dedicated efforts made by Danish politicians and public agencies to achieve real upgrades in the healthcare system are paying off. This is also corroborated by the fact that Denmark



emerged as the total winner of the 2008 Euro Consumer Diabetes Index.

Consumer and patient rights are improving. In a growing number of European countries, there is healthcare legislation explicitly based on patient rights, and functional access to one's medical record is becoming standard. Still, very few countries have hospital/clinic catalogues with quality rankings. Canada ranks very poorly in this sub-discipline in particular.

Generally, European healthcare continues to improve but medical outcomes are still appallingly poor in many countries. This is particularly true regarding the number one killer: cardiovascular diseases. Canada, on the other hand, achieves one of its five Green scores for cardiac outcomes.

In some respects, progress is not only slow but also lacking. MRSA infections in hospitals seem to spread and are a significant health threat in one out of two measured countries. Half of the governments systematically delay consumer access to new medicines and not just for reasons of poor national wealth.

Canada's major weak spot in the Index is still waiting times for treatment; Canada scores the lowest possible score in this category. For years, the wait-time situation in Canadian healthcare has been on the discussion agenda for all levels of government and has become the most important healthcare issue among healthcare providers. Even if waiting times in Canada have showed improvements in certain areas over the last years, when compared to the European competition, Canada still has a long way to go.

Some eastern EU member systems do surprisingly well considering their much smaller healthcare spending in purchasing power adjusted dollars per capita. However, readjusting from politically-planned to consumer-driven economies does take time.

If healthcare officials and politicians look across borders and "steal" improvement ideas from their colleagues, there is a good chance for a national system to come much closer to the possible top score of 1,000. As a prominent example, if Sweden could achieve a German or Swiss waiting-list situation, that alone would lift Sweden to the top of the Index with a total score of 869.

3.1.1 Country scores

No country excels across the entire range of indicators. The national scores seem to reflect national and organizational cultures (including attitudes) rather than a reflection of how many resources a country spends on healthcare. In all likelihood, the cultural aspects have 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, i.e., those that offer a choice of health insurance solutions and 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 Denmark and the Netherlands score high on openness and patients' access to their medical information. Scores of countries such as Canada, Germany, France, Italy and Greece suffer from what seem to be an "expert"-driven attitude to healthcare, where patients access healthcare information with healthcare professionals as intermediaries rather than accessing the information directly.

In an attempt to summarize the main features of the scoring of each country included in the Index, the following table gives a somewhat subjective synopsis. To the consumer, i.e., most of us, a description and comparison of healthcare requires some simplifications. (A medical information system deals with scientific evidence such as individual diagnosis or medication guidelines requires very strict criteria; in contrast, the Index should be seen as consumer information and it cannot be considered scientific research.)

Country	Scoring Synopsis
Austria	Very good medical results and excellent accessibility to healthcare. Austria leads the EU on overall cancer survival. Slightly autocratic attitude to patient empowerment risks affecting good therapy outcomes.
Belgium	Good at accessibility; suffers on outcome quality, possibly because of an even weaker reporting culture than the European average. Remarkably slow at offering access to new medicines.
Bulgaria	Has a long way to go. Public health situation also suffers from severe life-style related problems (obesity, smoking, alcohol) affecting cardiac disease and other death rates.
Canada	Solid medical outcomes, moderate-to-poor provision levels, and very poor scores with regard to patients' rights and accessibility. Canada is in the bottom quartile in the overall matrix; Canada's very high level of healthcare spending means that when adjusted for bang-for-the-buck, the country places last in the that ranking.
Croatia	Scores well on patient rights and information, probably due to good legislative background of patients' position within the healthcare system. The ranking would likely be better if statistics on waiting times and pharmaceuticals had been available.
Cyprus	Problematic to score, as no other member state has as high a proportion of healthcare being privately funded. If the patient can afford to pay out of pocket, good healthcare can be had in any country.
Czech Republic	Solid mid-field performer with improvement record. Could reconsider resource distribution between healthcare staff and equipment/medicines; notoriously thrifty on prescription drugs.
Denmark	Ranked number one on patient rights and information, and e-Health. Danes are very satisfied with their primary care, and medical outcomes have improved; hence the solid top spot in the Index. Waiting times could improve.
Estonia	Estonia, with its population of 1.5 million people, proves that a small country can engage in dramatic change quicker than larger nations. It takes more than a dozen years to change a top-down planned economy to become a customer-driven one. Good on MRSA infections and efficient financial administration of pharmaceuticals. Sweeps the floor with competition on value-for-money adjusted scores.

Country	Scoring Synopsis
Finland	Good medical outcomes and range and reach of services. The waiting list situation is still the Achilles Heel in a European comparison. Not much of consumer empowerment to be seen yet.
France	Poor on e-health and increased restrictions on access to specialist care create a fall in ranking from top position two years ago. Reasonably good outcomes quality but slightly authoritarian—if you want healthcare information, you must ask your doctor. Waiting times for specialist appointments are rising.
FYR Macedonia	Scores well on patient rights and information probably due to good legislation; ongoing reform promises further improvement. Acceptable levels if we consider the resources available and socio-economic background of the country. Problem with lack of healthcare coverage; particularly for ethnic minorities.
Germany	Superb access to healthcare but surprisingly mediocre outcomes and range and reach of services. Germany does not actively invite pro-active care; e.g. women and access to mammography screening, and has poor coverage in spite of unlimited access.
Greece	Doctors in charge. Some improved medical outcomes, but still too many out-of-pocket (and under-the-table) payments. E-health seems to not have been heard of in Greece.
Hungary	Recent improvement of patient rights and information services is paying off. Promising attempt to start an information revolution in healthcare. 60 years of publicly financed healthcare has resulted in good coverage but medical outcomes are still disappointing.
Ireland	The Health Service Executive reform seems to have started improving a historically dismal performance. The severe waiting list problems seem to be improving, and so are medical outcomes. However, patient organizations do not seem to have discovered this.
Italy	Technically excellent in many places, but poor geographical equity. Autocratic attitude from doctors prevents Italy from scoring high in a consumer index. A power shift to patients necessary.
Latvia	At this point, Latvia lacks in resources and organizational culture to be considered a consumer-adapted system. The country does consist of more than downtown Riga; poor geographical equity. Acute need for a system overhaul by external auditors.
Lithuania	Noticeable improvement on patient rights and information, and access to healthcare service. Still a long way from good outcomes but seems to have risen from the absolute bottom level which it formerly occupied.
Luxembourg	Winners of the 2008 Heart Index and rising in the EHCI - have had the good sense (not self-evident in the public sector) to allow its citizens to visit centres of excellence in other countries instead of insisting every procedure performed at home. It is unclear what has withheld e-Health implement-ation, perhaps complacency?

Country	Scoring Synopsis
Malta	The opening of the first state-of-the-art hospital in Malta (Mater Dei, November 2007) should provide the opportunity to obtain better care. High diabetes prevalence, possibly due to highest obesity rates in Europe.
Netherlands	During the past four years the HCP has been unable to design an Index where the Dutch are not in the top five countries. Holland may in fact possess the best healthcare system in Europe. Full marks on range and reach of services. Holland should eliminate general practitioner "gatekeeping" and do away with waiting times to become superb.
Norway	Still some access problems in spite of having poured significant money into healthcare. Slow on new medicines deployment, and lots of prescription medicines outside subsidy system. E-Health proficient in the top four.
Poland	It takes more than a dozen years to change a top-down planned economy to a customer-driven one. Healthcare management reform necessary in order to make decently paid professionals actually stay and work in hospitals, Poor access to new medicines and to low-cost prevention such as mammography and blood sugar control.
Portugal	Severe access problems. Low infant mortality one of the few bright spots. It takes consistent action to change the long-term downturn. Better transparency could be a first step.
Romania	Shares the problem of unofficial payments to doctors with several of its neighbours. Good healthcare obtained this way unfortunately does not score in the EHCI, apart from possibly improving waiting times scores.
Slovakia	Not as financially stable as their Czech neighbours, and not significantly consumer-oriented. Informal payment problems. Weak on medical outcomes. Some improvement on patient rights and involvement in decision-making.
Slovenia	Noticeable improvement on patients rights and information. Decent outcomes, but range and reach of services and waiting times have scope for improvement. Still poor access to new medicines.
Spain	It still seems that private healthcare is needed if patients want real excellence. Informal payments in the public system are a small problem for in southern Europe. Fairly good access to medicines.
Sweden	Excels at medical outcomes and good healthcare coverage. Poor (and worsening) accessibility; oddly, the system has found no cure for waiting.
Switzerland	Running outside of EU competition. In a consumer Index, a system based on individual responsibility does score high. Good but expensive.
United Kingdom	The NHS shares some fundamental problems with other centrally-planned healthcare systems such as Sweden. Would require top class management for that giant system. Superbug problems improving but still poor.

3.1.2 Results in "Pentathlon"

Sub-discipline	Canada	Austria	Belgium	Bulgaria	Croatia	Cyprus	Czech Republic	Denmark	Estonia	Finland	France	FYR Macedonia	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Norway	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	Switzerland	United Kingdom	Average
1. Patient rights and information	75	95	100	85	85	90	80	145	115	125	110	85	95	90	115	85	95	55	115	100	90	125	110	85	65	75	90	115	75	100	100	105	96
2. Waiting times for treatment	83	217	217	167	117	150	183	150	183	100	167	117	233	167	200	133	150	83	150	233	133	167	133	133	100	200	167	100	117	100	233	117	153
3. Outcomes	229	243	157	129	143	171	214	257	171	257	229	129	229	214	157	229	229	171	143	229	143	257	243	157	157	86	114	200	214	286	214	186	193
4. Range and reach of services provided	100	108	133	58	75	75	92	117	92	133	108	75	100	67	92	92	100	100	67	133	92	150	117	83	92	67	92	92	117	125	83	117	98
5. Pharmaceuticals	63	150	75	50	50	88	100	125	113	88	100	50	113	88	88	125	88	50	50	100	88	125	100	63	100	75	100	75	125	125	125	100	92

The Index is made up of five sub-disciplines. As no country excels across all aspects of measuring a healthcare system, it is therefore of interest to study how the 32 countries rank in each of the five parts of the "pentathlon." The scores within each sub-discipline are summarized in the table above.

As the table indicates, the total score for the Dutch healthcare system is to a great extent a product of an even performance across the sub-disciplines, very good medical quality and the only full score on range and reach of services. Runner-up Denmark is still in top position for patient rights and information.

The Swedish healthcare system would be a top contender were it not for an accessibility situation, which by Austrian, Belgian, German or Swiss standards only can be described as abysmal. Canada's healthcare system has much room for improvement and scores below the Index average in three out of the five sub-disciplines.

4. How does Canada compare to Europe?

The Euro-Canada Health Consumer Index 2009 is the second annual report in which the Canadian healthcare system is compared to the healthcare systems of Europe. The European countries, against which Canada is compared, span a wide range of systems with respect to wealth, population size and history. While all states provide public healthcare, the degree to which private care is available varies.

The Index research team has collected data on 32 healthcare performance indicators structured to a framework which consists of five sub-disciplines: Patient rights and information, Waiting times for treatment, Outcomes, Range and reach of services provided, and Pharmaceuticals. Each of these sub-disciplines reflects a certain logical entity, e.g. medical outcomes or waiting times.

Since the Index does not take the source of funding into consideration when measuring outcomes, this tool is especially suited to a discussion of how Canadian healthcare might be improved and brought up to the standard enjoyed in most of Europe. The Index thus avoids the overdone conflict about combining public and private care providers. It is worth stressing that the Index does reward outcomes and consumer-friendliness, not private or public solutions per se.

4.1 Patient rights and information

The patient rights and information sub-discipline tests the ability of a healthcare system to provide the patient with a status strong enough to diminish the gap between professional and patient. Even the poorest countries can grant the patient knowledge and a firm position within the healthcare system.

At their root, poor results in the other categories often have a culture that is disdainful of the rights of healthcare consumers and which lack in transparency. Transparency allows consumers to hold their healthcare providers accountable, and it is the only real mechanism for empowering consumers.

In the patient rights and information sub-discipline, Canada places ahead of only Latvia and Portugal; there is much room for improvement. Scoring of this sub-discipline is presented based on the ten following indicators.

4.1.1 Healthcare law based on patients' rights

At the national level, Canadian healthcare is largely governed by the Canada Health Act, CHA (1984). As healthcare is constitutionally a provincial responsibility, the CHA lays out the terms under which it will transfer money to the provinces for health spending. The Act determines treatments that are provided at public expense, imposes restrictions on additional fees and mandates portability and accessibility. Accessibility, though, is expressed solely in terms of the right of all patients to uniform treatment without regard to age, lifestyle or other circumstances. The right to timely, appropriate or effective treatment is not mandated.

Individual provinces have been considering various bills of rights for patients, but to date no province has a clearly enshrined right to timely and effective treatment that provides practical remedies, without which

patient guarantees are meaningless. In this regard, Canada falls well behind the great majority of European countries in the Index. Canada scores the lowest mark, Red. ○

4.1.2 Patient organizations involved in decision making

There is no statutory requirement to involve patient advocacy (or other stakeholder) groups in the policy-making process. Nonetheless, in practice, broad, national groups (such as the Canadian Cancer Society and the Canadian Diabetes Association) as well as more disease-specific patient groups are invited to share information with policy-making bodies and they commonly endorse or criticize decisions made by regional, provincial and federal bodies regarding healthcare and their area of interest. While a full score is awarded to countries in which patient and consumer groups are formally included in the formation of health policy, Canada gets partial marks, Amber, for doing this in common practice. ◑

4.1.3 No-fault malpractice insurance

Canada does not have no-fault medical malpractice insurance. Patients seeking compensation after an adverse event only have the option of suing their healthcare provider. There is a growing awareness that this system only focuses on finding faults instead of cultivating efficiency or patient safety. Recommendations have also been made at the federal level to improve this situation. As long as medical staff is discouraged from admitting errors for fear of lawsuits or until patients can get compensation without the assistance of the judicial system, Canada retains a score of Red on this indicator. ○

4.1.4 Right to a second opinion

Canada provides no guaranteed right to a second opinion. While many patient advocacy groups speak of a "right to a second opinion," this right is not guaranteed in law. Many provinces and regional health authorities encourage consumers to request a second opinion if they are not confident in the diagnosis or recommendations of their physician but they provide no recourse for patients if such a request is denied.

Further, since a second opinion from a specialist requires a referral and often a lengthy wait, even those regions that seek to provide second opinions have great difficulty in translating this into reality. The literature indicates that the accessibility of second opinions remains much worse than that of specialist referrals in general. Canada accordingly gets the lowest mark on this indicator, Red. ○

4.1.5 Access to own medical record

Canadian law considers medical records the property of the practitioner, with the patient retaining the right to access the contents. In practice, this means that unless a physician can demonstrate that allowing the patient or his proxy access to a record will harm the patient or a third party, the contents of the record must be made available to patients. Practitioners can require that records be examined only in their presence, or charge a fee for the transfer of information, making the exercise of this right occasionally

problematic. Because Canadians have the nominal right to access their records but the exercise of this right is subject to various conditions, Canada scores Amber on this indicator. ◑

4.1.6 Register of legit doctors

All provincial medical associations provide a directory of physicians within their province. Medical associations will also provide disciplinary action information, although often the nature of such complaints and the disciplinary action taken is not available to the public. The accessibility and content of physician directories vary greatly between provinces. Verified physician profiles and information on family physicians accepting new patients are not always readily available through a web- or telephone-based service. Further, because many registries depend upon self-reporting from physicians and accurate information about specialties is harder to obtain, Canada scores Amber. ◑

4.1.7 Web or 24/7 telephone health-care information

Almost all provinces and territories provide 24/7 telephone access to registered nurses through call centres. The Public Health Agency of Canada provides some basic health information online and at the provincial level many health ministries also provide access to healthcare information online. However, there is a great range in the quality and accessibility of the information offered. Based on the large proportion of the population having access to 24/7 healthcare hotlines Canada gets the highest mark on this indicator, Green. ●

4.1.8 Provider catalogue with quality ranking

The federal Canadian Institute for Health Information collects comprehensive statistical information on hospital performance but this information is not available to the public. Further, Canadian hospitals are not compelled to publicly report statistics. As a result there are no provider (or hospital) listings available where patients can actually see which hospitals have good results in term of actual success rates or survival percentages. Canada scores Red on this indicator. ○

4.1.9 e-Health proficiency

Canada Health Infoway, an organization funded by the federal government, has set as its goal that 50 per cent of Canadians should have electronic patient records by 2010. An article published in Health Affairs, 2007, states that only 23% of primary care practices in Canada uses electronic medical records. Since the Index cut-off for the lowest criteria is a 50% use of electronic medical records among general practitioners, Canada is clearly in the bottom category for this indicator and scores Red. ○

4.1.10 Cross-border care information

This indicator is meant to measure the willingness of national governments to perform PR for cross-border healthcare. Since Canada's healthcare system does not encourage healthcare delivery outside of each respective provincial health authority, cross-border care information is lacking. Patients might, under special circumstances, be sent out of province for

treatment or obtain healthcare out of the country, but this generally only happens in cases where medical treatment is not available or waiting lines are too long. Canada scores Red on this indicator. ○

4.2 Waiting times for treatment

Health consumers with a complicated condition can be subject to up to four lengthy waits: first, to see their family doctor, or to find a general practitioner; second, to see the appropriate specialist for their ailment; third, for diagnostic procedures to determine appropriate treatment; and fourth, for treatment. Relative to the other indicator areas, the waiting times for treatment sub-discipline and the outcomes sub-discipline are given higher weights to reflect of the importance they have to patients.

Waiting times is Canada's weak spot in the Index: Canada shares last place with Latvia in the waiting times sub-discipline. This sub-discipline is made up of five indicators, which are discussed below.

4.2.1 Family doctor same day access

This indicator tests a very reasonable demand: Can I count on seeing my primary care doctor today? The 2007 Commonwealth Fund International Health Policy Survey interviewed adults in seven countries. Twenty-two per cent of Canadian respondents stated they received an appointment the same day the last time they needed care, while 30% waited more than six days to get an appointment. As a comparison, the same results for the UK were 41 and 12%, respectively. Canada receives the lowest mark on this indicator, Red. ○

4.2.2 Direct access to specialist

While a referral to see a specialist is not required in Canada, incentives makes self-referral a rarity in practice. Without a referral, specialists may see patients, but since the fee is reduced most practices operate by referral only. On this indicator Canada scores Red. ○

4.2.3 Major non-acute operations <90 days

This indicator looks at the decision-to-treat to treatment interval for a basket of coronary bypass/PTCA and hip/knee joint surgeries. Nationwide, Canadian provinces report up-to-date waiting times for a variety of procedures. Generally, waiting times for bypass and angioplasty surgeries are poorly reported, while waiting times for knee and hip surgeries are well above a median of 90 days. Taken together, Canada again scores Red in the waiting times sub-discipline. ○

4.2.4 Cancer therapies <21 days

This indicator measures the time interval between the treatment decision date and cancer treatment (radiation therapy and chemotherapy). Also, for cancer treatment waiting times, most provinces provide incomplete and inconsistent measures. From the wait time data posted, significant differences between provinces can be noted. Overall, including data from reports from cancer organizations, Canada scores Red for cancer treatment waiting times. ○

4.2.5 MRI examinations <7 days

While Canada has substantially fewer MRI scanners per capita than many other countries, a recent survey of public MRI facilities in Canada (Emery et al.) reported that strategies in place to reduce wait times are largely ineffective and uncoordinated. From the reported waiting times for MRI examinations provided by provincial health ministries, no province comes close to the Index waiting time cut-off of three weeks. As an example, Ontario posts a median waiting time of over 14 weeks. Canada scores Red also on the last indicator on waiting times. ○

4.3 Outcomes

The outcomes sub-discipline assesses the performance of different national healthcare systems when it comes to results of treatment. Healthcare professionals sometimes think about the healthcare system predominantly in the terms of medical outcomes – inferring that what really counts is the result. To some extent, we do agree and this is reflected in a relatively high weight attributed to the outcomes sub-discipline indicators. The strength of Canada's healthcare system lies in its ability to deliver good medical outcomes. Canada ranks among the top ten performers in the outcomes sub-discipline. The seven indicators on medical outcomes are as follow:

4.3.1 Heart infarct case fatality

In Europe, data on heart infarct rates is surprisingly fragmented and incoherent. Canadian heart infarct case mortality rates are not available, but comparing the available 30-day in-hospital rate, 11.1%, with the equivalent European data gives Canada a score of Amber. ◑

4.3.2 Infant deaths

In developed countries, increased infant mortality occurs primarily among very low birth weight infants, many of whom are born prematurely. In Europe, very low birth weight infants account for more than half of all infant deaths. Looking at data both excluding and including prematurely born infants (4.4/1,000 live births ≥ 500 grams and 5.4/1,000 live births, respectively) Canada does not fully measure up to the top countries in the Index. Canada scores Amber on this indicator. ◑

4.3.3 Cancer 5-year survival

This indicator measures the percentage of patients alive five years after their initial diagnosis of cancer. Reports on five-year survival for cancer puts Canada is in a competitive position relative to the European top-performers. The Index cut-off point for a Green score is an age-standardized five-year relative survival rate of 60%. With a survival rate of 59%, Canada scores Amber on this indicator. ◑

4.3.4 Avoidable deaths – years of life lost

Potential years of life lost, PYLL, is an estimate of the years of life forfeited by those who die prematurely. This indicator takes into account the age at which deaths occurs by giving greater weight to deaths at younger age and lower weight to deaths at older age. With a score of 3,365 years lost per 100,000 population, Canada scores Amber on this indicator. ◑

4.3.5 MRSA infections

Public disclosure of nosocomial infection rates, such as MRSA infection, is not mandatory in Canada. Starting as late as 2008, participating healthcare institutions are now asked by Accreditation Canada to report infection rates for either C. difficile or MRSA. The most recent available data on MRSA rates in Canada is from 2003 and states a 10.4% incidence rate of MRSA in Canadian hospitals (percentage of S. aureus isolates which are resistant). More recent studies indicate that MRSA infections are a growing problem in the Canadian healthcare setting, and this most likely means that the actual incidence rate is higher than what was reported in 2003. On this indicator Canada scores Amber.

4.3.6 Rate of decline of suicide

This is a new indicator for the 2009 Index and measures the relative decline of suicide rate. By using logarithmic values, effects from countries having very different absolute suicide rates are eliminated. Thus, a country lowering its suicide rate from four to three receive the same trend line as a country lowering its rate from 40 to 30. Since the mid-1990s Canada shows a stable declining trend in the number of suicides, matched only by a handful of countries in the Index. On this indicator Canada scores Green.

4.3.7 Percentage of patients with high HbA1c levels (>7)

This is another new indicator for the ECHCI. The HbA1c test is an important assessment tool of how well diabetes has been managed for individual patients.

While there is no official and national report on this indicator in Canada, a 2005 national cross-sectional study reported that 49% of diabetes patients had an HbA1c higher than 7. This puts Canada among the top countries in the Index with a score of Green.

4.4 Range and reach of services provided

This sub-discipline measures the breadth of services provided and the rate at which insured services are offered. Canada's healthcare system performs close to the Index average when it comes to range and reach of services provided. However, Canada does underperform in two of the five indicators in this sub-discipline: infant vaccination and dental care affordability. A closer look at the six indicators that make up the range and reach of services provided sub-discipline is given here.

4.4.1 Cataract operations

This indicator measures the number of cataract operations performed on seniors aged 65 years and older. Compared with other more costly procedures for non-life-threatening conditions, cataract operations seem to be a good and less GDP-correlated indicator on the generosity of public healthcare systems. Canada reports a competitive number of 821 procedures per 100,000 population aged 65 years and older and scores Green on this indicator.

4.4.2 Infant 4-disease vaccination

The most recent national data on infant 4-disease vaccination (diphteria, tetanus, pertussis and polio) dates back from 2004 and states an immunization coverage

rate of 78.5%. A 2009 report from the Ontario Ministry of Health stated immunization coverage rate estimates of 75% for Toronto and 66-70% for all Ontario children (children who had received all recommended vaccines by the age of two). On the infant vaccinations indicator Canada scores Red. ○

4.4.3 Kidney transplants

There is a common notion that the number of kidney transplants is greatly influenced by factors outside the control of healthcare systems, such as the number of traffic victims in a country. However, the level of kidney donations reflects a complex range of factors internal to the healthcare system. A high level of donation requires everything from appropriate training for anaesthesiologists, dedicated donation teams that involve doctors, nurses and counselors, and a high number of ICU beds. This means that the level of kidney donations is an excellent indicator on how healthcare services perform, not an indicator on the volume of traffic victims. With 37 transplants per million people, Canada scores Amber on this indicator. ◑

4.4.4 Dental care affordability

Dental care is generally not included in Canadian Medicare, leaving patients to rely on private dental insurance. While, in 2003, 61% of all Canadians reported having dental insurance, 18% cited cost a reason for not seeking dental care and only 29% of seniors had insurance. Canada scores Red on this indicator. ○

4.4.5 Mammography reach

This indicator was introduced as a proxy of practical ability to organize and follow a simple screening on a well-defined and easily reachable target population. Statistics Canada reports that 70.4% of females aged 50-69 were screened within the last two years. This gives Canada a score of Amber for the mammography reach indicator. ◑

4.4.6 Informal payments to doctors

This is also a new indicator for the ECHCI. An informal payment is considered any payment made by the patient in addition to official co-payment. As reported in this year's ECHCI and in the Euro Health Consumer Index 2008, under-the-table payments are more common in some Western European countries than perhaps previously believed. However, in Canada there are no indications of unofficial payments and Canada scores Green on this indicator. ●

4.5 Pharmaceuticals

Effective use of pharmaceuticals has the potential to significantly reduce the need for more drastic interventions and to improve the quality of life for consumers. The availability of pharmaceuticals is a crucial measure of how well a healthcare system serves its consumers. Whether most people can afford drugs is one aspect of this. Others are the speed with which new drugs are made available to consumers and the degree to which information about new drugs is accessible to the public. Canada's score in the pharmaceutical sub-discipline is very low, placing above only a handful of countries.

A look at the four indicators that make up this sub-discipline follows below.

4.5.1 Rx subsidy

Canada does not have a national pharmaceutical program. Each province sets its own policy for access, coverage and cost sharing and as a result copayments vary greatly between provinces. Overall, public expenditure on prescription medicines totals 48%, earning Canada a score of Red on this indicator. ○

4.5.2 Layman-adapted pharmacopeia

Canada does not have a consumer-friendly service equivalent to US-based RxList, a medical resource website, which offers detailed pharmaceutical information on both brand and generic drugs. The Drug Product Database, DPD, offered by Health Canada is a listing of drugs approved for use in Canada. The database covers 23,000 drugs but information on each drug is sparse and the data provided is of a very technical nature. While the DPD serves healthcare professionals, it is not adapted to the needs of consumers. Canada scores Red on this indicator. ○

4.5.3 New cancer drugs deployment speed

The Cancer Advocacy Coalition of Canada reports that the time difference between Canada and the US to approve new cancer drugs decreased since their last review of approval times. Their report from 2007 stated that the new cancer drugs that met Health Canada's regulatory requirements had a median delay of seven months for approval compared with the US.

Since the level of funding and access to cancer drugs varies between provinces in Canada, additional waiting times such as provincial funding approval and guideline writing are also added to the total waiting time before a drug can be used by patients. Looking at major new cancer drugs and the delay between their approval and first use, Canada is close to the EU average and scores Amber on this indicator. ◑

4.5.4 Access to new drugs (time to subsidy)

This indicator measures the average time from date of approval for marketing to the date of formulary listing. According to an OECD report from 2006, the speed of access to new drugs across Canada was around one year or longer, well above the Index cut-off for a top score. Canada scores Red on this indicator.

5. Bang-for-the-Buck Adjusted Scores

After assessing 32 national healthcare systems, it is apparent the Index tried to compare states with a significant difference in financial resources. The annual healthcare spending, in PPP-adjusted (Purchasing Power Parity) U.S. dollars, varies from less than $500 in FYR Macedonia to more than $4,000 in Norway, Switzerland, and Luxembourg. Continental Western Europe and the Nordic countries generally fall between $2,700 and $3,500, while Canada spends close to $3,700. As an attempt to account for these differences, the ECHCI Index includes a value-for-money adjusted score: the Bang-For-the-Buck adjusted score (BFB score).

5.1 BFB adjustment methodology

At the outset, it was not immediately apparent on how to perform such an adjustment. If scores were adjusted in proportion to healthcare spending per capita, all less affluent states would be elevated to the top of the scoring sheet.

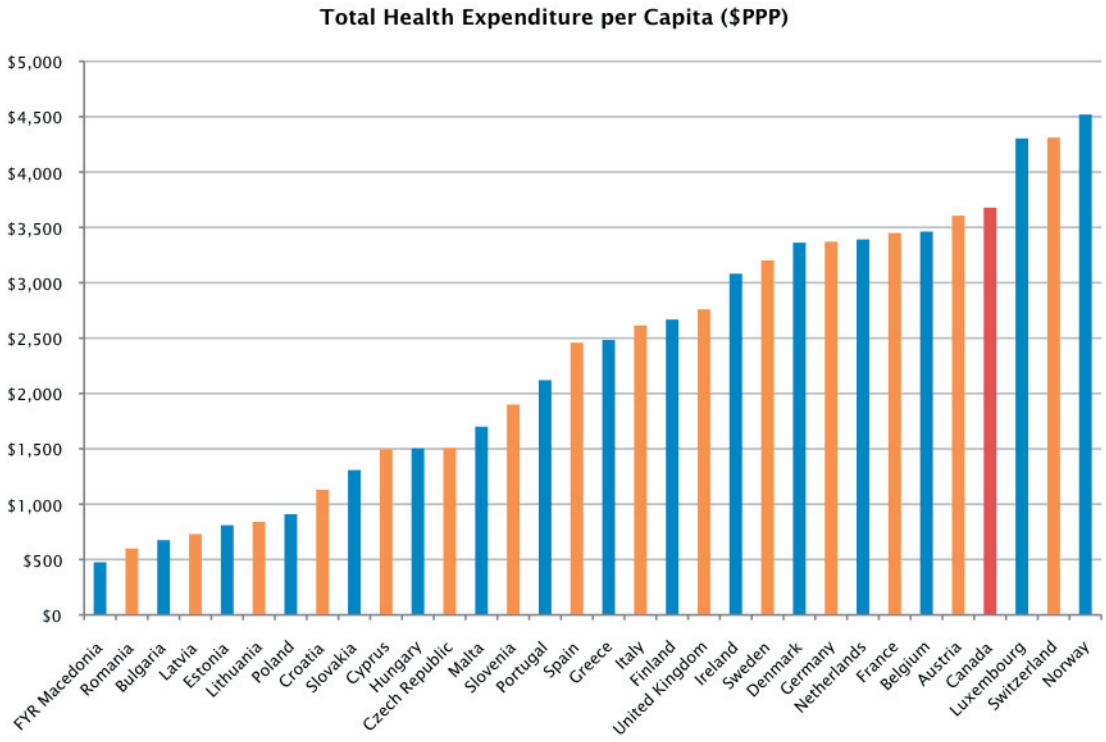
This, however, would be decidedly unfair to the financially stronger states. Even if healthcare spending is PPP adjusted, it is obvious that also PPP dollars go a lot further to purchase healthcare services in member states where the monthly salary of a nurse is € 200, than in states where nurses' salaries exceed € 3,500. For this reason, the PPP adjusted scores were calculated as follows:

Healthcare spending per capita in PPP dollars was taken from the WHO HfA database (July 2008; latest available numbers, most frequently 2006) and from the OECD Health Database (December, 2008) as illustrated in the graph below*:

The square root of this number was calculated for each country. The reason for this is that domestically produced healthcare services are cheaper roughly in proportion to the healthcare expenditure. The basic ECHCI scores were divided by this square root. For this exercise, the basic scoring points of 3, 2 and 1 were replaced by 2, 1 and 0. In the basic ECHCI, the minimum score is 333 and the maximum 1,000. With 2, 1 and 0, this does not (or only very marginally) change the relative positions of the 32 countries, but is necessary for a value-for-money adjustment – otherwise, the 333 "free" bottom points have the effect of just catapulting the less affluent countries to the top of the list.

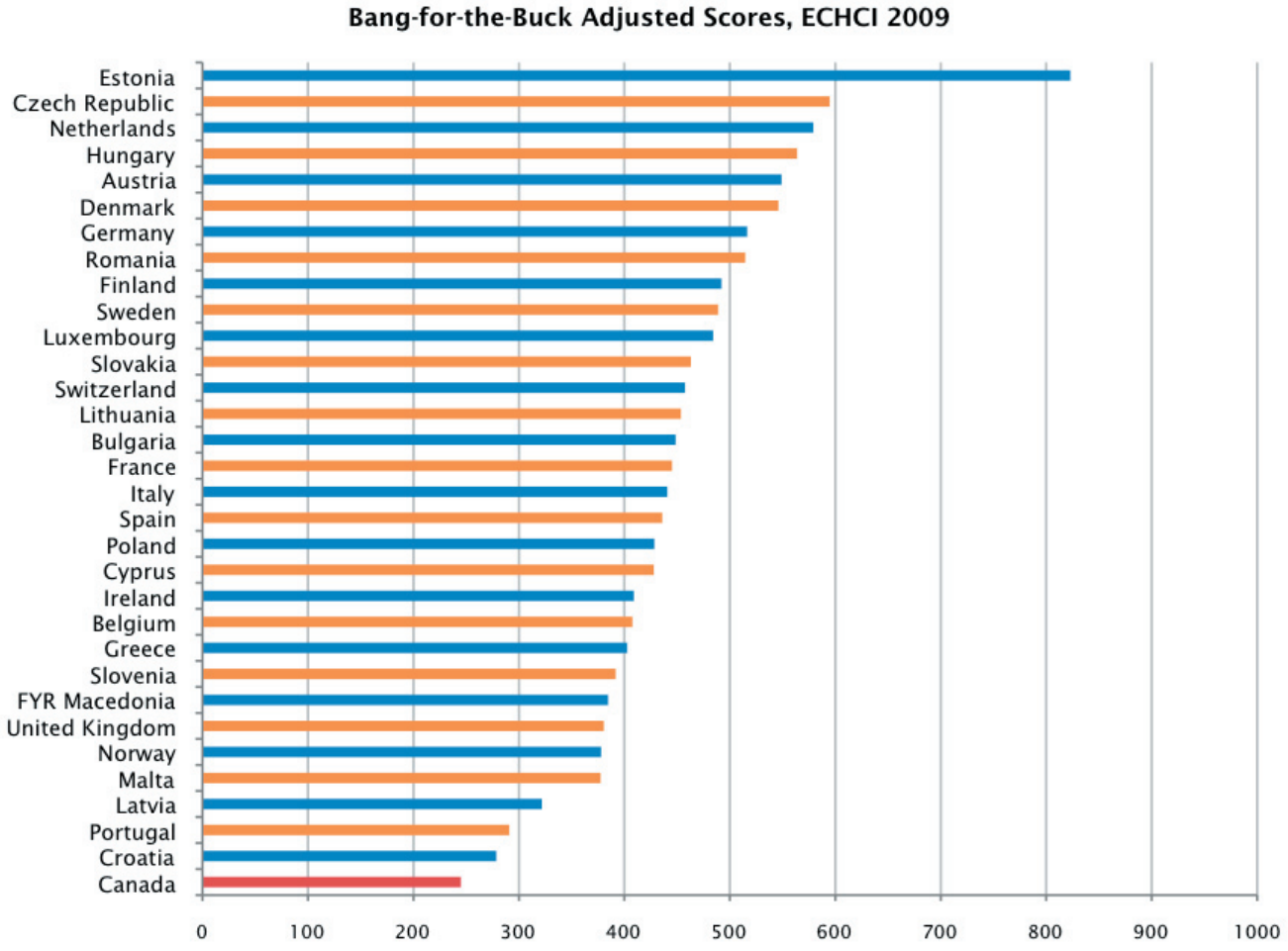
The score thus obtained was then multiplied by the arithmetic means of all 32 square roots (creating the effect that scores are normalized back to the same numerical value range as the original scores).

*For Bulgaria and Romania, the WHO HfA database (July 2008) contains old values for the healthcare spend; "latest available" is $214 and $314, respectively, which are unreasonably low numbers. The European Observatory HiT report (http://www.euro.who.int/Document/E90023brief.pdf) on Bulgaria quotes the WHO, giving the number $648, also confirming the fact that this is slightly higher than the Romanian figure. The number for Romania was taken from a report from the Romanian MoH (http://www.euro.who.int/document/MPS/ROM_MPSEURO_countryprofiles.pdf), also quoting the WHO. Both these are a year old, and have therefore been raised by the same percentage as GDP growth for the purpose of this analysis.



5.2 Results in the BFB score sheet

The outcome of the BFB exercise is shown in the graphic below. Even with the square root exercise described in the previous section, many less affluent nations are dramatically elevated in the scoring sheet.



The BFB scores, naturally, should be regarded as somewhat of an academic exercise. Not least, the method of adjusting to the square root of healthcare spending certainly lacks scientific support. After the research work, however, it does seem that the supreme winner in the 2008 and 2009 BFB scores, Estonia, continues to do well within its financial capacity. To some extent, the same could be said about Hungary and the Czech Republic.

Of particular interest to the authors is to compare how countries that top the list in the BFB scores also do well in the original scores. Examples of such countries are primarily the Netherlands, Denmark and Austria; with Germany, Finland and Sweden doing reasonably well. The U.K. has a less prominent position in the 2009 BFB exercise than in previous years – it would seem that the increased healthcare spending in the U.K. has not yet led to improved healthcare services—at least not that which can yet be seen in the results.

Canada, which spends more on healthcare than any country in the Index except Luxembourg, Switzerland and Norway, performs very poorly in four of the five matrix disciplines. As a consequence, when the quality of care delivered is compared with the cost of providing that care, Canada, just as it did last year, sits at the very bottom in the BFB ranking.

Obviously, high healthcare expenditures do not automatically transfer into better healthcare. Instead of pouring money into the healthcare system, improvement can come about in other ways, e.g. by holding healthcare providers more accountable for results and changing provisions for healthcare funding.

6. How to interpret the Index Results

The first and most important consideration on how to treat the results is to not leap to dramatic conclusions. The Euro-Canada Health Consumer Index 2009 is an attempt to measure and rank the performances of healthcare systems from the viewpoint of a consumer. The results contain information which on occasion possess quality problems; for example, there is a shortage of multi-country uniform procedures for data gathering.

That caveat noted, the authors we find it far better to present our results to the public and to promote constructive discussion rather than to stay with the very common opinion that as long as healthcare information is not 100 per cent complete one had better "keep it in the closet." Again, we stress that the Index displays consumer information, not medically or individually sensitive data.

It is clear, though, that Canada has significant room for improvement. The first change, and the one which will enable improvements in all other indicators, is in the area of patients' rights. Without a culture that encourages healthcare consumers to demand and receive the best, outcomes, accessibility, and generosity are unlikely to improve. A crucial first step will be the provision of meaningful guarantees. Patients' bills of rights can be a useful approach to this, but only if the bills include remedies for situations wherein consumers cannot access appropriate care. There have been some attempts in Canada to create such legislation, but so far nothing but reports and reviews has come of this. Progress in this area will be tracked in future editions of the Euro-Canada Index, as well as in the upcoming interprovincial index.

A consumer-sensitive culture would also be more transparent, with better information widely available on how the healthcare system performs. Today, hospitals and other health institutions do not publicly report patient care information, thus leaving patients without a chance to compare or assess the quality of care. Canadians must also have the right to access their own medical records (which should be in electronic format), and they should have ready access to specialists, diagnostics and treatment.

Given Canada's abysmal rating in the Bang-for-the-Buck ranking, a simple increase in health budgets is not the answer. Much more can be done with the money already budgeted on healthcare in Canada. Accessibility and generosity, especially as it pertains to the preventative measure of vaccination, are two areas that are particularly ripe for reform.

7. Scope and content of the Euro-Canada Health Consumer Index

The aim of the EHCI and the ECHCI is 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 served by the respective systems.

Canadians will benefit from better understanding the range of possibilities for healthcare that exist in Europe. The Index will make it possible for consumers to approach healthcare as critically as they do other vital services, and this can only benefit everyone. Responsive, consumer friendly healthcare with excellent outcomes is possible – it is achieved in the top-performing countries in Europe and can also be achieved in Canada.

7.1 Strategy and background

In April 2004, HCP launched the Swedish Health Consumer Index. By ranking the 21 county councils (the regional parliaments responsible for funding, purchasing and providing healthcare) by 12 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 for 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 throughout Sweden confirmed that the image of healthcare is rapidly moving from rationed public goods to consumer-related services that are measurable by common quality perspectives.

For the Euro Health Consumer Index, the Health Consumer Powerhouse aimed to follow the same approach, i.e., selecting a number of indicators that described 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 co-operation, the ambition of HCP is to be seen as a partner in developing healthcare around Europe.

In the initial years of index building, opinion brokers and policy-makers – as with journalists, experts and politicians – are the key audience for the index. Gradually, the health consumer could become the main reader along with service providers, payers and authorities. Such a development will require user-friendly services and a deep knowledge of consumer values. Interactivity with users and other parts of the European healthcare society will be another key characteristic.

The Euro-Canada Health Consumer Index is a step toward in bringing consumer-friendly healthcare to Canada; the very existence of the Index will produce an atmosphere in which Canadians can see how their system succeeds and fails. To date, Canada lacks a culture in which consumers have high expectations of healthcare services and significant reform is unlikely without this.

7.2 Indicators introduced for the ECHCI 2009

As in every year, the international expert panel presented a long list of new indicators to be included in this year's Index; there was a true brainstorming about new, useful ideas. Unfortunately, the research team was unable to turn all of them into a green-yellow-red score in the matrix.

Nevertheless, the research team was able to present data for five new indicators spread out over three sub-disciplines:

Sub-discipline 1 (Patient rights and information)

1.10 Cross border care information

Sub-discipline 3 (Outcomes)

3.6 Rate of decline of suicide; 3.7. Percentage of patients with high HbA1c levels

Sub-discipline 4 (Range and reach of services provided)

4.5. Mammography reach; 4.6. Informal payments to doctors

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 who wants to choose among therapies or care providers, who is waiting in line for planned surgery or worries about the risk of having a post-treatment complication, or the consumer who is dissatisfied with the restricted information.

7.3 Indicator areas (sub-disciplines)

The project work on the Index is 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 classic problem: "Should we be looking for the 100-dollar bill in the dark alley, or for the dime under the lamppost?"

The 2009 Index is, as with its 2008 version, built with indicators grouped in sub-disciplines. After surrendering to the "lack of statistics" syndrome, and after scrutiny by the expert panel, 32 indicators made it into the ECHCI 2009. Of the 27 indicators from last years Index, none was discontinued from the set in the 2009 Index.

The indicator areas for the ECHCI 2009 thus became:

Sub-discipline	Number of indicators
1. Patient rights and information	10
2. Waiting times for treatment	5
3. Outcomes	7
4. Range and reach of services provided	6
5. Pharmaceuticals	4

7.4 Scoring

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 (●), Amber = so-so (◑) and Red = not-so-good (○). A green score earns 3 points, an amber score 2 points and a red score (or a "not available") earns 1 point. For each of the five sub disciplines, the country score was calculated as a percentage of the maximum possible (e.g. for Waiting times, the score for a state has been calculated as a percentage of the maximum 3 x 5 = 15).

Thereafter, the sub-discipline scores were multiplied by the weight coefficients given in the following section and added up to make the final country score (rounded to nearest integer).

7.5 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.

For the EHCI 2006 explicit weight coefficients for the five sub-disciplines were 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 ECHCI 2009, the scores for the five sub-disciplines were given the following weights:

Sub-discipline	Relative weight ("All Green" score contribution to total maximum score of 1000)	Points for a Green score
1. Patient rights and information	150	15.00
2. Waiting times for treatment	250	50.00
3. Outcomes	300	42.86
4. Range and reach of services provided	150	25.00
5. Pharmaceuticals	150	37.50

Consequently, as the percentages of full scores were multiplied by their respective relative weights and added, the maximum theoretical score attainable for a national healthcare system in the Index is 1,000 and the lowest possible score is 333.

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 ECHCI 2009 is remarkably stable if the weight coefficients are varied within rather wide limits.

The project has 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.

7.6 Regional differences

The Health Consumer Powerhouse is well aware that many European states and Canada have decentralized healthcare systems. This is the case as well in the U.K. It is often argued that Scotland and Wales have separate health services and should be ranked separately, while Canada has ten provincial systems that overlap in many ways but are not identical. From a comparison standpoint, systems devolution might raise new challenges, but publicly-funded and publicly-governed systems have many more features in common than those that are isolated or hard to compare.

Grading healthcare systems does present a certain risk of encountering the problem whereby one foot in an ice bucket and the other on a hot plate would result in an average temperature. This problem would be quite pronounced if there were a desire to include the United States as one country in a health consumer index. As equity in healthcare has traditionally been high on the agenda in both Canada and Europe, it was judged that regional differences are small enough to make statements about the national levels of healthcare services relevant and meaningful.

Many Canadian indicators are readily available at the national level. For those indicators present only at the provincial level, a national value was obtained by weighting each province's performance according to its share of the total population. It should be noted that even with the large spread in values from province to province for some indicators, the overall score was easy to evaluate. For example, looking at pharmaceutical coverage even the more generous provincial plans requires a level of individual spending that qualifies for the lowest score in the Index.

These differences and their impact on healthcare performance are looked at closer in the separate Canadian province-to-province index. It became clear while evaluating Canada that much room exists for provinces to learn from each other's best practices. The Canada Health Consumer Index, first launched in 2008, highlights these potential areas for improvements, as well as indicates where the provincial systems consistently fail to meet the needs of healthcare consumers.

8. Indicator definitions and data sources

Sub-discipline	Indicator	Comment	Score 3	Score 2	Score 1	Main Information Sources
1. Patient rights and information	1.1. Healthcare law based on patients rights.	Is national healthcare legislation explicitly expressed in terms of patients' rights?	Yes	Various kinds of patient charters or similar bylaws	No	Patients' Rights Law; http://www.healthline.com/galecontent/patient-rights-1; http://www.adviceguide.org.uk/index/family_parent/health/nhs_patients_rights.htm; Colleen M. Flood & Tracey D. Epps. Waiting for Health Care: What Role for a Patients' Bill of Rights? McGill Law Review. Vol. 49, No. 3, 2004
	1.2. Patient organizations 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; Survey of major patient advocacy groups within Canada.
	1.3. 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 no-fault insurance); www.hse.ie; www.hiqa.ie; Rekindling Reform: Health Care Renewal In Canada, 2003-2008. Health Council of Canada. 2008.
	1.4. Right to second opinion		Yes	Yes, but difficult to access due to bad information, bureaucracy or 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; Review of Canadian legislation and health ministry mandates on a province by province basis.
	1.5. Access to own medical record	Can patients read their own medical records?	Yes	Yes, restricted or with intermediary	No	Patients' Perspectives of Survey Healthcare Systems in Europe, survey commissioned by HCP 2008; Health and Social Campaigners' News International: Users' perspectives on healthcare systems globally. Patient View 2005; Personal interviews; www.dohc.ie; McInerney v. MacDonald, [1992] 2 S.C.R. 138.
	1.6. Register of legit doctors	Can the public readily access the info: "Is doctor X a a bona fide specialist?"	Yes, easily on the Internet	Yes, in easily accessible publications	Difficult, costly, or not at all	Patients' Perspectives of Healthcare Waiting times in Europe, survey commissioned by HCP 2007; National physician registries; http://www.sst.dk/Tilsyn/Individuelt_tilsyn/Tilsyn_med_faglighed/Skaerpet_tilsyn_med_videre/Skaerpet_tilsyn/Liste.aspx; Provincial Colleges of Physicians and Surgeons in Canada.

Sub-discipline	Indicator	Comment	Score 3	Score 2	Score 1	Main Information Sources
1. Patient rights and information	1.7. Web or 24/7 telephone healthcare information	Information which can help a patient take 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 generally not available	No	Patients' Perspectives of Health-care Systems in Europe; survey commissioned by HCP 2008. Personal interviews; http://www.nhsdirect.nhs.uk; www.hse.ie; www.ntpf.ie; Survey of information provided by provincial health ministries.
	1.8. Provider catalogue with quality ranking	"Dr. Foster" in the U.K. remains the standard European qualification for a Green score. The "750 best clinics" published by LaPointe in France would warrant a Yellow.	Yes	Not really, but nice attempts under way	No	http://www.drfoster.co.uk; http://www.sundhedskvalitet.dk; http://www.sykehusvalg.no; http://www.hiqa.ie; http://212.80.128.9/gestion/ges161000com.html; Survey of provincial health ministries and regional health authorities web sites.
	1.9. e-Health proficiency	What percentage of GP practices uses electronic patient records?	> 90%	50 - 90%	< 50%	Commonwealth Fund International Health Policy Survey of Primary Care Physicians; Benchmarking ICT use among GP:s in Europe. European Commission, 2008. Study by Empirica. Bonn, Germany (p.60). Gartner Group; CEEC-IST-NET. EFPConsulting. 2006. Project co-funded by the European Commission; Toward Higher-Performance Health Systems: Adults' Health Care Experiences in Seven Countries, 2007. Health Affairs. 2007.
	1.10. Cross-border care information	Percentage stating lack of information stated as a reason for not seeking medical treatment abroad	Less than average	Close to EU average	More than EU average	Cross-border health services in the EU. Eurobarometer. June 2007.

Sub-discipline	Indicator	Comment	Score 3	Score 2	Score 1	Main Information Sources
2. Waiting times for treatment	2.1. Family doctor same day access	Can I count on seeing my primary care doctor today? Yes	Yes	Yes, but not quite fulfilled	No	Patients' Perspectives of Health-care Waiting times in Europe, survey commissioned by HCP 2008; Health and Social Campaigners' News International: Users 'perspectives on healthcare systems globally. Patient View 2005; Personal interviews; http://www.nhs.uk; Toward Higher-Performance Health Systems: Adults' Health Care Experiences in Seven Countries, 2007. Health Affairs. 2007.
	2.2. Direct access to specialist	Without referral from family doctor (GP)	Yes	Not really, but quite often in reality	No	Patients' Perspectives of Health-care Waiting times in Europe, survey commissioned by HCP 2008; Personal interviews with health care officials; http://www.im.dk/publikationer/healthcare_in_dk/healthcare.pdf; http://www.ic.nhs.uk/; http://www.oecd.org/datao; Toward Higher-Performance Health Systems: Adults' Health Care Experiences in Seven Countries, 2007. Health Affairs. 2007.
	2.3. Major non-acute operations <90 days	Coronary bypass/PTCA and hip/knee joint	90% <90 days	50 - 90% <90 days	>50% >90 days	OECD data: Siciliani & Hurst, 2003/2004; Patients' Perspectives of Healthcare Waiting times in Europe, survey commissioned by HCP 2008; http://www.frittsykehusvalg.no; http://www.sst.dk; http://www.im.dk/publikationer/healthcare_in_dk/healthcare.pdf; http://sas.skl.se; Websites of provincial health ministries.
	2.4. Cancer therapies <21 days	Time to get radiation/chemotherapy after decision	90% <21 days	50 - 90% <21 days	>50% >21 days	OECD data: Siciliani & Hurst, 2003/2004; Patients' Perspectives of Healthcare Waiting times in Europe, survey commissioned by HCP 2008; http://www.frittsykehusvalg.no; http://www.sst.dk; http://www.sst.dk/Nyheder/Seneste_nyheder/Ventetider_straalebehl_uge23_24.aspx; Websites of provincial health ministries.
	2.5. MRI examinations <7 days		Typically <7 days	Typically <21 days	Typically >21 days	Patients' Perspectives of Health-care Waiting times in Europe, survey commissioned by HCP 2008; http://www.frittsykehusvalg.no; http://www.sst.dk; http://www.venteinfo.dk/; http://sas.skl.se; Emery, D.J. et al. Management of MRI Wait Lists in Canada. Healthcare Policy. Vol. 4, No. 3 2009; Personal interviews with healthcare officials; Websites of provincial health ministries.

Sub-discipline	Indicator	Comment	Score 3	Score 2	Score 1	Main Information Sources
3. Outcomes	3.1. Heart infarct case fatality	Heart infarct mortality less than 28 days after getting to hospital	<18%	18 - 25%	>25%	Compilation from OECD Health at a Glance. December 2007; MONICA; National heart registries; Variation in Heart Attack Mortality in Canada (CIHI Survey). Healthcare Quarterly. Vol. 9 No. 4, 2006.
	3.2. Infant deaths	Per 1,000 live births	<4	4 - 6	≥6	World Health Statistics 2008. WHO Statistical Information System. 2008; European health for all database (HFA-DB). WHO.
	3.3. Cancer 5-year survival	All cancers except skin	≥60%	50 - 60%	≤50%	Wilking, N.; Jönsson, B. A pan-European comparison regarding patient access to cancer drugs. Karolinska Insititutet. 2005; Coleman et al.: Cancer survival in five continents: a worldwide population-based study; The Lancet Oncology Vol. 9 2008; Cancer Survival Statistics 1992-99. Statistics Canada. 2008.
	3.4. Avoidable deaths – years of life lost	All causes, years lost per 1000,000 population, 0 - 60 years old	<3,300	3,300 - 4,500	>4,500	OECD Health Data 2008; Non-OECD: WHO HfA SDR.
	3.5. MRSA infections	Percentage of hospital-acquired infections being resistant	<5%	5 - 20%	>20%	EARSS. Data from 2007. Croatia, Germany, Lithuania, Luxembourg, Malta 2008. Poland 2006. Slovakia 2005; Surveillance for Methicillin-Resistant Staphylococcus aureus in Canadian Hospitals - A Report Update from the Canadian Nosocomial Infection Surveillance Program. CCDR 2005 Vol. 31-03. Public Health Agency of Canada. 2005.
	3.6. Rate of decline of suicide	Incline of e-log line for suicide SDR:s 1990 - l.a	Greater reduction than EU average	Reduction rate close to EU average		No reduction or increase MINDFUL project; WHO HfA Mortality database; Statistics Canada: 1990-1998: Suicide deaths and suicide attempts. Health Reports. Catalogue 82-003. Vol. 13 No. 2 2002., CANSIM table 102-0552 and Catalogue 84F0209X. 2007.
	3.7. Percentage of patients with high HbA1c levels (>7)	Percentage of total diabetic population with high HbA1c levels (> 7)	< 50%	50 - 60%	> 60%	EUCID; Interviews with national diabetes experts and health care officials; National Registries; S.B. Harris et al. Glycemic control and morbidity in the Canadian primary care setting (results of the diabetes in Canada evaluation study). Diabetes Research and Clinical Practice 70. 2005.

Sub-discipline	Indicator	Comment	Score 3	Score 2	Score 1	Main Information Sources
4. Range and reach of services provided	4.1. Cataract operations	Cataract surgery, number of procedures per 100,000 population, >65 years	>5,000	3,000 - 5,000	<3,000	OECD Health Data 2008; WHO Prevention of Blindness and Visual Impairment Programme; European Community Health Indicators; Personal interviews; Surgical Volume Trends, 2008: Within and Beyond Wait Time Priority Areas. Canadian Institute for Health Information. 2008.
	4.2. Infant 4-disease vaccination	Diphtheria, tetanus, pertussis and poliomyelitis. Arithmetic mean	≥97%	92 - 97%	<92	WHO European HFA-DB: Data from 2006, except Croatia, Germany, Luxembourg, Netherlands, Slovenia, Switzerland: 2005, France, Greece, Hungary, Romania: 2004; Canadian National Report on Immunization, 2006. Canada Communicable Disease Report. Vol. 32S3, November 2006; Childhood Immunization Coverage in Toronto. Report from Medical Officer of Health, Ontario. January 2009.
	4.3. Kidney transplants	Living and deceased donors, procedures per 1,000,000 population	≥40	30 - 40	< 30	OECD Health Data 2008; Council of Europe Newsletter 11/2006; Rozental R. Donation and transplantation in Latvia 2006. Ann Transplant. 12(1):37-9 2007; Croatian registry for renal 2007; replacement therapy.
	4.4. Dental care affordability	Percentage responding dental care to be "not at all affordable/not very afford-able"	≤40%	40 - 60%	≥60%	Eurobarometer 283, December 2007; Dental Consultations. Health Reports. Vol. 16 No. 1 October 2004. Catalogue 82-003. Statistics Canada; Model Core Program Paper: Dental Public Health. British Columbia Ministry of Health Services. 2006.
	4.5. Mammography reach	Percentage of females aged 50-69 screened, latest data available. European target is 70%	≥80%	60 - 80%	≤60%	OECD Health Data 2008; WHO World Health Survey 2006; Personal interviews; Health Indicators. June 2006. Catalogue 82-221. Statistics Canada.
	4.6. Informal payments to doctors	Mean response to question: "Would patients be expected to make unofficial payments?"	No	Sometimes; depends on the situation	Yes, frequently	Patients' Perspectives of Healthcare Systems in Europe, survey commissioned by HCP 2008.

Sub-discipline	Indicator	Comment	Score 3	Score 2	Score 1	Main Information Sources
5. Pharmaceuticals	5.1. Rx subsidy	Percentage of Rx sales paid for by public subsidy	> 90%	60 - 90%	< 60%	WHO European HFA-DB; OECD Health Database 2008.
	5.2. Layman-adapted pharmacopeia	Is there a layman-adapted pharmacopeia readily accessible by the public (www or widely available)?	Yes	Yes, but not really easily accessible	No	Patients' Perspectives of Healthcare Systems in Europe; survey commissioned by HCP 2006. Personal interviews. LIF Sweden. http://www.doctissimo.fr; Norwegian Medicines Agency; Drug Product Database (DPD). Health Canada.
	5.3. New cancer drugs deployment speed		Quicker than EU average	Close to EU average	Slower than EU average	Wilking, N. & Jönsson, B. A pan-European comparison regarding patient access to cancer drugs. Karolinska Institute. Stockholm 2007; Report Card on Cancer in Canada 2007. Cancer Advocacy Coalition of Canada.
	5.4. Access to new drugs (time to subsidy)	Between registration and inclusion in subsidy system	<150 days	<300 days	>300 days	Wilking, N. & Jönsson, B. A pan-European comparison regarding patient access to cancer drugs. Karolinska Institute. Stockholm 2007; Valérie Paris and Elizabeth Docteur. Pharmaceutical Pricing and Reimbursement Policies in Canada. 2006. OECD Health Working Paper 24.

8.1 Additional data gathering – survey

In addition to public sources, as was also the case for last year's Index, an e-mail survey to patient organizations was commissioned from PatientView (Woodhouse Place, Upper Woodhouse, Knighton, Powys, LD7 1NG, Wales, Tel: +44-01547-520-965, E-mail: info@patient-view.com). The 2008 survey covered a total of ten indicators. 539 patient organizations responded to the survey, and the lowest number of responses from any single country was 3 (Malta), except from FYR Macedonia from where no responses were obtained.

8.2 Additional data gathering – feedback from National Ministries/Agencies

On October 8, 2008, preliminary score sheets were sent out to Ministries of Health or state agencies of all the 31 European states, giving them the opportunity to supply more recent data and/or higher quality data than what was available in the public domain. Canadian federal and provincial health agencies will be invited to participate in subsequent editions of the ECHCI.

This procedure was prepared for during the spring and summer of 2008 by extensive mail/e-mail/telephone contacts and personal visits to ministries/agencies. Finally, feedback was received from official national sources as illustrated in the following table (next page):

Country	Responded in 2006	Responded in 2007	Responded in 2008
Austria		√	√
Belgium	√		
Bulgaria	not applicable	√	
Croatia	not applicable	not applicable	√
Cyprus	√		
Czech Republic	√		√
Denmark		√	√
Estonia	√	√	√
Finland	√	√	√
France		√	
FYR Macedonia	not applicable	not applicable	
Germany			
Greece			√
Hungary	√	√	√
Ireland		√	√
Italy			
Latvia	√		
Lithuania		√	√
Luxembourg		√	√
Malta	√	√	
Netherlands	√		
Norway	not applicable		
Poland	√	√	√
Portugal	√		
Romania	not applicable	√	√
Slovakia		√	
Slovenia	√		√
Spain		√	
Sweden			
Switzerland			
United Kingdom		√	

Responding countries are those who actually returned a "single country score sheet" with comments. With few exceptions, simpler forms of feedback on a limited number of indicators were received from all but a handful of countries – several of those returning a full score sheet in 2007 sent simpler responses for this year's survey.

Score sheets sent out to national agencies contained only the scores for that respective country. Corrections were accepted only in the form of actual data, not by national agencies just changing a score (frequently from Red to something better, but surprisingly often honesty prevailed and scores were revised downwards).

The majority of the data concerning Canada was checked against secondary sources. Where this was not possible, experts in the public and private sectors were consulted to verify that values and facts corresponded to their observations of the reality of healthcare in Canada. In future iterations of the Euro-Canada Index, authorities at the federal and provincial levels will be invited to correct their scores, subject to the same scrutiny.

8.3 Threshold value settings

It was not our ambition to establish a global, scientifically based principle for threshold values to score Green, Amber or Red on the different indicators. Threshold levels were set after studying the actual parameter value spreads in order to avoid having indicators showing all Green or completely Red.

The HCP believes that the involvement of patients' organizations in healthcare decision-making is a good idea. This indicator was included in 2006, with no country scoring Green. In this year's Index, Green score is attained by Belgium, Estonia, Germany, Hungary, Ireland, Lithuania, the Netherlands, Poland and Slovakia. (Incidentally, patient organization involvement was made law in Germany in November of 2004, but not until 2008 did this reflect in the responses to the Patient View survey.)

Setting threshold values is typically done by studying a bar graph of country data values on an indicator sorted in ascending order. The usually "S"-shaped curve yielded by that is studied for notches in the curve, which can distinguish clusters of states, and such notches are often taken as starting values for scores.

A slight preference is also given to threshold values with even numbers. An example of this is the cancer 5-year survival indicator, where the cut-offs for Green and Amber were set at 60% and 50% respectively, with the result that only four states scores Green.

Finally, the HCP is a value-driven organization. We believe in patient/consumer empowerment, an approach that places highest importance on quantitative and qualitative healthcare services. As illustrated by the provider catalogue with quality ranking indicator, this sometimes leads to the inclusion of indicators where only few countries, theoretically none, score green (in this case, only Denmark and the UK do).

9. How the ECHCI 2009 was built

The work on the Euro-Canada Heath Consumer Index 2009 began with the 2008 index and a desire to retain the main structure so that the possibility of making comparisons over time would not be destroyed. The Index was developed in harmony with the EHCI 2008, using parallel methods and data gathering. The ECHCI 2009 was constructed under the following project plan.

9.1 Phase 1

Start-up meeting with the Expert Reference Panel – Mapping of existing data

The composition of the Expert panel can be found in section 9.6. 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, journal search

a) Relevant bylaws and policy documents

b) Actual outcome data in relation to policies

Telephone and e-mail interviews with key individuals

a) National and regional Health Authorities

b) Institutions (EHMA, Cochrane Institute, Picker Institute, University of York Health Economics, Legal-ethical papers of Catholic University in Leuwen, others)

c) Private enterprise (IMS Health, pharmaceutical industry, others)

Personal visits and interviews when required (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

9.2 Phase 2

- Data collection to assemble presently available information to be included in the EHCI 2008
- Identification of vital areas where additional information needed to be assembled
- Collection of raw data for these areas
- A round of personal visits by the researchers to Health Ministries and/or State Agencies for supervision and/or Quality Assurance of Healthcare Services
- We kept regular contact with the Expert Reference Panel (see section 9.6) mainly to discuss the indicators, the criteria to define them, and the data acquisition problems. Finally, we had a second meeting on October 8th, in which we talked in detail about each of the indicators, including the ones that could not be included in the Index due to lack of data. Also, the discrepancies between data from different sources were analyzed.

9.3 Phase 3

Consulting European patient advocates and citizens through HCP survey performed by external research facility (Patient View, U.K.)

The EHCI survey contained the questions found in Appendix 1 of the EHCI 2008 report. The survey was committed in partnership with The Patient View (see also section 8.1 for more information). The closing date was October 31st; 833 responses were submitted.

"Score update sheet" send-out

On October 8, 2008, all 31 states received their respective preliminary score sheets

(with no reference to other states' scores) as an e-mail send-out asking for updates/ corrections by October 31. The send-out was made to contacts at ministries/state agencies as advised by states during the contact efforts prior to October 2008. Two reminders were also sent out. Corrective feedback from states was accepted up until November 4th, by which time replies had been received from countries denoted in section 8.2.

9.4 Phase 4

Project presentation and reports

- A report describing the principles of how the EHCI 2008 was constructed
- Presentation of the EHCI 2008 at a press conference and seminar in Brussels, November 13, 2008
- On-line launch, www.healthpowerhouse.com

9.5 Phase 5

The inclusion of Canada

- A partnership between HCP and FCPP was created in order to integrate Canada into the EHCI 2008
- FCPP staff studied HCP's methodology and prior indexes
- A list was compiled of equivalent or comparable metrics to allow Canada to be evaluated in parallel with the 31 countries in the EHCI 2008
- Data collection and verification

Much information about the EU member states were already harmonized and prepared in a consistent format. Every effort was made to ensure that the comparison between Canada and the 31 European countries was fair.

Canadian data were collected from publicly available sources, including government data from all three levels of government, public and private institutions for the study of healthcare and health policy and existing literature and research. The results of this data collection were further examined in the context of existing literature, as well as the experience of practitioners, consumers and administrators, to verify that they correspond reasonably well with the reality of healthcare "facts on the ground." Data were obtained from publications online, published periodicals, government documents and correspondence with sources.

9.6 External expert reference panel

As is the standard working mode for all HCP indexes, an external Expert Reference Panel was recruited. Having been sent the index working material in advance, the panel members met for two six-hour sittings during the course of the project. The following people took part in the Expert Reference Panel work:

Name	Affiliation
Juan Acosta, Chief Medical Officer	Best Doctors, Inc. (Europe). Madrid, Spain
Martin R. Cowie, Professor	National Heart and Lung Institute. Imperial College. London, U.K.
Wilfried von Eiff, Professor Dr. Dr. Universität Münster. Münster, Germany	Centrum für Krankenhaus-Management.
Iva Holmerova, Asst. prof. MUDr.	Gerontologicke Centrum, and Charles University. Prague, Czech Republic
Danguole Jankauskiene, Asst. prof., Vice-Dean of the Strategic management and policy department	Mykolas Romeris University. Vilnius, Lithuania
Meni Malliori, Ass. Prof of Psychiatry	Athens, Greece
Leonardo la Pietra, Chief Medical Officer	Eur Institute of Oncology. Milan, Italy

The Expert Reference Panel for an HCP Index has two core tasks:

1. To assist in the design and selection of sub-disciplines and indicators. This is obviously of vital importance for the Index, if the ambition is to be able to say that a state scoring well can truly be considered to have good, consumer-friendly healthcare services.

2. To review the final results of research undertaken by HCP researchers before the final scores are set. If the information obtained seems to clash too violently with the many decades experience represented by the panel members, this is taken as a strong signal to do an extra review of the results.

The HCP wishes to extend its sincere thanks to the members of the panel for their fundamentally important contribution to the Index work, and for very valuable discussions.

10. FAQs

Why is the ECHCI 2009 produced, and for whom?

The HCP and FCPP provide the Euro-Canada Health Consumer Index to empower consumers of healthcare services. When you make public comparisons, things start to happen. When you do them systematically, experience show that things grow better.

Improved insight into European healthcare standards will support patient mobility within the EU. Evaluating Canada in this context will provide ample opportunities for Canadian policymakers and consumers to consider new and effective ways to deliver accessible and excellent healthcare.

Why add Canada, a non-European country?

The Canadian healthcare system – publicly financed and governed – has much more in common with Europe than its American counterpart, to which it is traditionally compared. All the countries included in the Index share Canada's commitment to accessible and effective healthcare, and by comparing the performance of Canada's healthcare institutions with those of the extremely varied 31 European states, we can develop a better understanding of the performance of Canada's model and how it might be improved in the future.

What will this index bring to Canada?

The Euro-Canada Health Consumer Index is a step towards bringing consumer friendly healthcare to Canada. The very existence of the Index providex an objective basis by which Canadians can see how and where their system is succeeding and failing. Canada lacks a culture in which consumers have high expectations of healthcare services, without which significant reform is unlikely. Ultimately, Canadians will be well-served by a better understanding of the range of possibilities for healthcare that exist in Europe. Responsive, consumer-friendly healthcare with excellent outcomes is possible – it is being achieved in the top performing states in Europe, and can be achieved in Canada as well.

You talk of "consumers" – does this mean that you want to privatize Canadian healthcare?

No, to us the term "healthcare consumer" expresses the evolution where the weak, uninformed patient becomes transformed into the powerful, informed actor – the consumer. This transformation is essential in meeting the higher, more sophisticated service expectations among modern people and building pressure for consumer-oriented change from below.

The Index is neutral on whether there are public and private funding solutions to healthcare, i.e. there are no criteria to measure how the healthcare system is funded. Public-private or left-right distinctions are not considered in the Index's analysis.

It is called a Consumer Index – can consumers easily understand this information?

Rankings of consumer services – for example, in housing, mobile phones or cars – are increasingly important. Healthcare consumers have a clear interest in learning more so they can make the best possible choices.

Although the Index contains a great deal of relatively complex information, it is presented in a matrix, in a consumer-friendly way, that shows the differences in the consumer orientation of healthcare.

How can the consumer use the Index?

The Index highlights the strong and weak points of the national healthcare system. Such insights can provide a foundation for making informed choices. For example, "Can I ask for a second opinion?" "Is it necessary to go abroad to find treatment?" In the new era of patient mobility and "health tourism" cross-border consumer comparisons will have a growing importance.

This is now the fifth year of this kind of indexes. What concrete difference have the index findings made?

The indexes have contributed significantly to healthcare investments in a number of countries. For instance, following our 2006 EHCI, the Danish government added more money to improve Danish healthcare. In Ireland, its poor ranking caused a media outcry and intense political debate that resulted in pressure for reform. In Sweden, significant steps toward public ranking of healthcare were taken following the release of our report.

One significant difference the Index has created has in improved transparency of information required to make such comparisons. Ireland, for instance, suffered in the 2006 index by furnishing out-of-date and incomplete information. As a result, it – and many other countries – were much more forthcoming in supplying this information in subsequent years. This in turn improves the reliability of the Index. The European Commission has declared that transparency and competition are essential elements for making European healthcare more efficient.

What will be the next step?

The FCPP will continue to work with the HCP to produce evaluations of Canada's performance as compared with European healthcare systems. Additionally, the second Canadian Health Consumer Index, in which provincial performances are assessed along lines similar to those of the Euro-Canada Index but tailored to Canadian health issues, will be released later in 2009. HCP is also working on pan-European disease-specific indexes, such as heart disease and diabetes.

Who is behind the EHCI?

The index was initiated and produced by the Health Consumer Powerhouse, which holds the copyright to the Indexes. The HCP is a private healthcare analyst and information provider, registered in Sweden, with offices in Brussels and Stockholm. The Frontier Centre for Public Policy, an independent and non-partisan Canadian think-tank, has partnered with HCP to produce the Euro-Canada Index.

How was the ECHCI 2009 funded?

The pan-European Indexes are HCP flagship products, now introduced into Canada through its partner, the Frontier Centre for Public Policy. HCP accepts non-restricted research and educational grants from institutions and companies and sells healthcare-related information in the competitive-intelligence market. The HCP does not, however, accept grants from any entities measured in the indexes.

Regarding the Euro-Canada Index 2009, HCP has sold limited rights to use the index methodology and brand to FCPP.

The FCPP is funded by private sector donors and charitable foundations that support public policy research. It does not accept any government grants. A strict separation is maintained between donors, the centre's board of directors and all research activity.

Is it possible to measure and compare healthcare in this way – from a consumer perspective?

Yes. Healthcare is the largest industry in the world and there is a pressing need to find relevant and comprehensive ways of assessing its performance, and not just to measure the input of resources (staff, beds, medication et cetera) as has been traditionally done without regard to outcomes.

The advantage of a more outcomes-focused method is that it zeroes in on measures that affect the ability of the consumers to use their healthcare services and on the differences between countries. It also helps consumers understand what more they can and should reasonably expect from their providers. A recent report from the Canadian Institute for Health Information describes important issues for measuring and comparing healthcare systems.

How reliable are index data?

The data are as reliable as the data that could be found using the methods described. HCP and FCPP have brought the data together from public statistics and our investigations and research. The access to public data in many fields is not only slow but also appallingly poor. This means that for one country the latest data might be quite recent, while for another it might be several years old. The HCP has a system to assess and validate all data, but there might be uncertain data that should be used selectively and with great care.

Some of the data used for the indicators are relatively dated and other sources are current. Why such a variation?

The Index always uses the most recent data. Highlighting the fact that such information might be dated is one purpose of the entire exercise. This is consumer information, and our view is that presenting data – even where inconsistent – is better than presenting nothing at all. This poor quality of public data represents a major challenge of governments and institutions rather than an index weakness.

Differing weights are given to indicators. Why?

Numerous surveys show that patients generally say that medical outcomes and accessibility to healthcare are the most important aspects of healthcare services. This is true even for countries, where waiting-list problems are slight.

What is measured – public health or healthcare performance?

Healthcare performance. Governments, EU and WHO deliver data on public health—undeniably important at the policy level. For consumers, we find that an assessment of what the national healthcare system delivers to patients as more relevant. We are not measuring public health in general, which is related closely to diet, smoking habits, obesity et cetera and cultural factors.

11. References

The main sources of input for the various indicators are given in Chapter 8 (Indicator definitions and data sources). For all indicators, this information has been supplemented by interviews and discussions with healthcare officials in both the public and private sectors.

11.1 Useful links

Useful complementary information was obtained from these Web sites:

http://www.aesgp.be

http://www.canadianemr.ca

http://www.cihi.ca (Canadian Institute for Health Information)

http://www.cmaj.ca (Canadian Medical Association Journal)

http://www.easd.org

http://www.diabetes-journal-online.de

http://www.drfoster.co.uk

http://www.rivm.nl/earss

http://www.eudental.org

http://europa.eu/abc/european_countries/index_en.htm

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

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

http://www.eurocare.it

http://www.ehnheart.org

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

http://www.escardio.org

http://epp.eurostat.ec.europa.eu

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

http://www.euro.who.int (Health Ministries of Europe addresses)

http://www.hc-sc.gc.ca/hcs-sss/delivery-prestation/ptrole/index-eng.php (Ministries of Health, Canada)

http://www.healthcouncilcanada.ca

http://www.hospitalcompare.hhs.gov

http://www.hope.be

http://www.idf.org

http://www.infoway-inforoute.ca (Canada Health Infoway)

11.1 Useful Links, Cont'd.

http://www.eatlas.idf.org

http://www.hospitalmanagement.net

http://www.lsic.lt (Lithuanian Health Info Centre)

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

http://www.medscape.com/businessmedicine

http://www.oecdbookshop.org (OECD Health Data)

http://www.oecd.org/els/health

http://aitel.hist.no/~walterk/wkeim/patients.htm (Patients' Rights Laws in Europe)

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

http://www.phac-aspc.gc.ca (Public Health Agency of Canada)

http://www.statcan.gc.ca (Statistics Canada, Health Indicators)

http://www.pickereurope.org

http://www.100tophospitals.com

http://www.vlada.si (Slovenia Health Ministry)

http://www.worldcongress.com

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.int/genomics/public/patientrights/en

http://www.waml.ws (World Association of Medical Law)

Other reading

Canada Health Consumer Index 2008

European and Canadian Think Tanks release first consumer-focused bench-marking of Canada's provincial healthcare systems

http://www.fcpp.org/main/publication_detail.php?PubID=2346

Canada's Doctor Shortage

Comparing Canada with the World

http://www.fcpp.org/pdf/FB61_DoctorF1.pdf