

# An Overview of the Canadian Health Care System

Iwona A. Bielska<sup>1</sup>, Elizabeth M. Hampel<sup>2</sup>, Ana P. Johnson<sup>1</sup>

<sup>1</sup> Department of Community Health & Epidemiology, Queen's University, Canada

<sup>2</sup> Department of Psychiatry, Queen's University, Canada

*Address for correspondence:* Iwona A. Bielska, Department of Community Health and Epidemiology, Queen's University, Carruthers Hall, Room 211, 62 Fifth Field Company Lane, Kingston, Ontario K7L-3N6 Canada, iwona.bielska@queensu.ca

## Abstract

The Canadian health care system is a publicly financed system administered by ten provincial and three territorial governments. The purpose of this article is to provide an overview of the universal health care system in Canada, including its history, the health status of Canadians, health care funding and spending, and health research and data collection. Health care spending in Canada amounts to 11.6% of the country's gross domestic product and is estimated to have been \$200.5 billion Canadian dollars in 2011. Hospitals account for the largest source of health care spending (29%), followed by drugs (16%) and physician spending (14%). Of the total health care spending, 70% is paid for by the public system. Due to the Canadian population being covered by the universal health care system, health data are being collected and can be used to monitor the health care system and inform evidence-based medicine.

**Key words:** Canada, delivery of health care, economics, financing, health services

**Słowa kluczowe:** ekonomika zdrowia, finansowanie, Kanada, świadczenie usług zdrowotnych, usługi zdrowotne

## Introduction

The Canadian health care system is a publicly financed system providing universal health coverage to its 34 million citizens [1–3]. Health care in Canada is funded and administered by the provincial and territorial governments as outlined in the Canadian Constitution [1]. The Canadian health care system is decentralized with a collection of thirteen health insurance plans in each of the ten provinces (British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec, New Brunswick, Newfoundland and Labrador, Nova Scotia, Prince Edward Island) and three northern territories (Northwest Territories, Nunavut, and Yukon) (**Figure 1**) [1–3]. The provinces and territories have primary jurisdiction over their health care system under the direction of their provincial or territorial Minister of Health [4]. The purpose of this article is to provide an overview of the health care system in Canada and discuss health care provision by the provincial and territorial governments. The overview describes the history of the health care system, health care funding and spending for hospitals, drugs, physicians, and non-insured services, as well as health research and data collection. All costs are presented in Canadian dollars.

## History of the Canadian Health Care System

Universal health coverage in Canada started in the mid-1940s when one of the provinces, Saskatchewan, established a health insurance plan to publicly cover hospital services [1, 2]. In 1957, the federal government passed the *Hospital Insurance and Diagnostic Services Act* to share the costs for hospital and diagnostic services with the provinces [1]. All Canadian provinces developed their own health insurance plans by 1961 [1, 2]. These health plans however did not cover physician fees and so in 1966, the *Medical Care Act* was passed by the federal government which extended public health coverage in the provinces to include physician services [1]. Universal health coverage was established with each of the provinces developing their own health insurance plans to cover medical services for their residents. The *Medical Care Act* was replaced by the *Canada Health Act* of 1984 which currently forms the basis for universal health coverage (Medicare) in Canada [1]. It aims to provide all eligible Canadian residents with “medically necessary” health services [1, 2] without patients having to incur direct financial charges in the form of user fees or cost sharing for their care [5].

Health care in Canada is governed by five criteria outlined in the *Canada Health Act* which are: public admini-



Figure 1. Map of Canadian provinces and territories [42].

Source: [www.brocku.ca/maplibrary/digital/in-house.php](http://www.brocku.ca/maplibrary/digital/in-house.php).

stration, comprehensiveness, universality, portability, and accessibility [1, 2]. Public administration stipulates that a public authority accountable to the provincial government must administer the health insurance plan within the province on a non-profit basis. The next criterion, comprehensiveness, states that each province must fund services that are “medically necessary” as determined independently by each province. The medical insurance plan within each province must also be universal, providing coverage to all eligible citizens on uniform conditions. The medical insurance plan ought to be portable by allowing citizens to be covered for medical care which is received in other Canadian provinces during temporary absences from their home province. Lastly, the *Canada Health Act* stipulates that health care services are reasonably and uniformly accessible to all citizens without financial barriers or discrimination [1, 2]. The *Canada Health Act* also states that patients should not incur user charges or extra-billing for medical services which are covered by provincial or territorial health insurance plans [4].

The federal government contributes to the provincial and territorial health care insurance plans through Canada Health Transfer payments, which account for about 15% of the total health care spending [1, 6]. Provinces and territories receive a share of the federal payments

if they adhere to the conditions outlined in the *Canada Health Act* and failure to do so may result in financial penalties for the provinces [4]. The rest of the health care funds (85%) come from provincial and territorial taxes [6]. For example, families earning the average Canadian household income of \$55,271 (2012 dollars) with a tax rate of 39.4% will pay an estimated \$5,285 towards health care from their taxes [7].

### Health Care Funding and Spending

The federal government is responsible for health care for the Aboriginal Peoples, Canadian forces members and veterans, and federal inmates [1]. The federal government directly funds Health Canada, which is the federal department responsible for national public health, the Public Health Agency of Canada which is responsible for health protection and health promotion, as well as health research through the Canadian Institutes of Health Research [6,8]. Provincial and territorial governments are responsible for the administration of health care spending in their provinces or territories [1,2].

Health care spending in Canada amounts to 11.6% of the country’s gross domestic product and according to the Canadian Institute for Health Information, it was estimated to have been \$200.5 billion Canadian dollars (CAD) in 2011 [8]. Per capita spending varies from province

to province (least in Quebec at \$5,261 and most in Newfoundland and Labrador at \$6,884) with the Canadian average being at \$5,811 [8]. Health care expenditures are the greatest in the Canadian territories (\$8,996 to \$11,929 per capita in Yukon and Nunavut, respectively) due to the delivery of health care services over a vast geographical area with a low population density [8]. The largest source of health care spending is for hospitals which account for 29.1% of total health care spending followed by drugs (16.2%) and physician spending (13.6%). Of the total health care spending, \$141 billion or 70% is paid for by the public system while the remainder is covered through the private sector, which is limited to providing coverage for uninsured health services [8].

### **Hospital Funding**

For the most part, hospitals in Canada are non-profit organizations which operate under the governance of a voluntary or religious organization, provincial health authority, or board of directors and are mostly publicly funded by the provincial governments [2, 9]. There are over 700 hospitals [9]. About 5% of the hospitals are privately funded (not-for-profit or for-profit) organizations [2, 9], which have either existed before the establishment of universal coverage and remain in operation or have been formed after the establishment of universal coverage [10, 11]. Depending on the province, for-profit hospitals may open if they provide publicly insured services to the residents; otherwise they may face challenges if their operation is not in accordance with the *Canada Health Act* [11]. Within the hospital system there are more than 45 teaching hospitals across Canada [12]. These hospitals are partnered with 17 Faculties of Medicine and Health Sciences and are involved in the training and education of physicians, nurses, and other health professionals, as well as research [12].

Not-for-profit hospitals are funded by the Ministry of Health in each of the provinces and territories [9]. The most common form of hospital funding is a global budget which provides hospitals with funding based on their previous spending patterns [9]. Another funding mechanism which is currently being taken up in some hospitals in provinces such as Ontario and British Columbia is activity-based funding or case-based funding which offers hospitals with remuneration based on the type and volume of services administered [13]. Funding is provided based on the expected costs of care and hospitalization of patients using a patient classification system like diagnosis-related-groups [14]. This system associates health care resources used to treat groups of patients with certain diseases and characteristics and in turn, determines the costs of such care. Medically-necessary and outpatient services provided within the hospitals are covered through the universal health insurance plans within the province or territory [1]. These plans cover the care received from health professionals including physicians, nurses, and other allied staff, as well as diagnostic services like imaging and laboratory tests [4]. Prescription drugs used during the hospital stay are also publicly financed.

Standard accommodation and food are covered under the health insurance plan while preferred accommodations (semi-private and private rooms) and certain additional services can be obtained for a fee through out-of-pocket payments or private health insurance [4, 8].

Hospitals make up the largest portion of health care spending encompassing 29.1% or \$58.4 billion of the total health expenditure in Canada [8]. It is estimated that 90% of total hospital funding is provided by the province while the remainder of the funding is raised by the hospitals through preferred accommodations, parking, real estate, investments, and donations [8, 15]. The largest hospital expenditure is employee compensation (not including physicians) accounting for 60.4% [15]. The rest of the expenditures can be broken down into supplies (12.6%), drugs (11.6%), physicians (8.8%), equipment amortization (2.6%), and other expenses (3.9%) [15]. The average cost of a hospitalization in Canada was \$6,983 in 2005 [16].

### **Drug Funding**

The regulation of the drug sector lies under federal jurisdiction with Health Canada being responsible for the safety, efficacy, and quality of pharmaceuticals under the *Food and Drugs Act*, as well as licensing and labeling new drug products [17]. The federal government is also responsible for pricing patented medicines [17]. In regards to drug costs, both prescription (out of hospital) and over-the-counter drugs are not insured through universal health coverage [17]. Drugs dispensed in hospitals are covered by the provincial and territorial health care systems [8, 17].

Drugs are listed in the provincial (except Quebec), territorial, and federal formularies based on a Common Drug Review process conducted under the auspices of the Canadian Agency for Drugs and Technologies in Health, which is an independent, non-profit agency funded by the government [18, 19]. The role of the process is to provide the governments with recommendations on whether to fund drugs based on the clinical, cost-effectiveness, and ethical evidence and considerations [19]. A parallel process for reviewing cancer drugs is undertaken by the pan-Canadian Oncology Drug Review. In Quebec, drug funding decisions are carried out by the Conseil du Médicament [19]. Each province and territory has its own drug benefit program which covers drugs in their formularies [17]. Public drug coverage ranges from providing drugs to financially disadvantaged populations like seniors, welfare recipients, and those individuals with medical or financial needs to universal eligibility [17]. About 9 million Canadians receive drug coverage through the publicly funded programs [20]. The remainder of the population is mostly covered by private or employer-sponsored drug programs [21]. The federal government provides drug benefits to about 1 million residents under its health care, including Aboriginal Peoples, Canadian forces members and veterans, and federal inmates [17, 21]. It is estimated that 2% of the Canadian population is not insured for drug coverage [22].

In 2009, drug sales were \$29.6 billion and were the second largest source of health expenditures in Canada [8]. Of the total cost of drugs, prescribed drugs represented the largest proportion (\$24.8 billion, 83.9%) of the cost and were mostly covered by the private sector (53.6%), which included both out-of-pocket and private health insurance expenses [8]. Other drug expenditures included over-the-counter drugs accounting for \$2.7 billion in costs (9.1% of total drug costs) and personal health supplies accounting for \$2.1 billion in costs (7.0%), both of which were covered by the private sector [8].

### **Physician Funding**

Canadian medical schools train about 2,880 students per year [23]. There are 17 medical schools in Canada located in 8 provinces: British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec, Nova Scotia, and Newfoundland and Labrador. Medical schools provide 3- or 4-year long training programs and award Doctor of Medicine (M.D.) degrees [23]. Typically, students entering medical schools have a bachelor's degree or at least 2 or 3 years of undergraduate education completed [24]. Physicians are licensed to practice medicine by Colleges of Physicians and Surgeons in each of the provinces or territories [25]. In order to be licensed, physicians need to pass Qualifying Examinations during medical school and post-graduate training offered by the Medical Council of Canada. Family physicians are certified by the College of Family Physicians of Canada, while specialist physicians are certified by the Royal College of Physicians and Surgeons of Canada. During medical practice, physicians are expected to continue their professional development through educational activities including self-learning, conferences, and rounds [26]. There are an estimated 72,500 physicians in Canada with 51% being family physicians and 49% being specialists [27].

Based on the 2010 National Physician Survey<sup>1</sup>, the majority of family physicians provided patient care in private offices or practice<sup>2</sup> (55.7%) followed by community clinics (8.6%) and emergency departments (8.0%) [28]. Most specialist physicians provided care in academic health sciences centres (35.4%), private offices or practice (23.7%), and community hospitals (13.7%) [28]. Most physicians worked in group practices (43.0%), followed by solo practice (27.3%) and interprofessional practice (20.9%). 70.3% of physicians report being on call [28].

Physicians make up the third largest share of health care spending in Canada, accounting for \$24.8 billion (13.6%) of the costs [8]. General practitioners and specialist physicians in Canada are primarily remunerated through fee-for-service payments based on the provincial fee schedules (41.9% of physicians) [5, 28]. A minority of physicians are salaried (8.5%) or receive sessional payments (3.2%) [5]. A third of physicians (32.3%) report receiving blended payments. In 2005, Canada had over 69,108 physicians representing 2.3 doctors per 1,000 people [5]. Based on data from Statistics Canada (the central statistical office in Canada), 6.6% of Canadi-

ans did not have a regular doctor and were unable to find one [29]. According to the Canadian Community Health Survey, 84.8% (84.3–85.2%) of the population has a regular medical doctor [30]. In 2010, 80.6% (80.1–81.1%) of Canadians reported having contact with their medical doctor in the past 12 months [30].

### **Non-Insured Services**

As mentioned earlier, 70% of Canada's health care expenditure is paid for by provincial or territorial governments [8]. Uninsured services are covered by the private sector, which encompasses services which are paid for out-of-pocket by the patient or by the patient's private or employer-sponsored insurance companies. The private sector is responsible for about 30% of the total health care expenditures in Canada and covers expenses for medications as well as allied professional services including physiotherapists, chiropractors, massage therapists, occupational therapists, podiatrists, naturopaths and psychologists [8]. It is reported that Canadian households cover 54% of non-insured service through out-of-pocket payments while the remainder of the coverage comes from insurance company payments [8].

The following services tend not to be covered by universal health care coverage in Canada: ambulance travel; dental services including professional fees for dentists, dental assistants, hygienists, denturists and the costs of dental appliances and prostheses; vision care including professional fees for optometrists and opticians, contact lenses and eyeglasses; out-of-hospital allied health professional visits: private care nurses, neither prescribed drugs nor over-the-counter drugs are covered for out-of-hospital care unless the patient resides in a province or territory and meets the drug benefit program eligibility [4, 8]. In addition, personal health products including oral hygiene and personal hygiene products are not covered [4, 8].

Non-insured health service expenses account for \$47.6 billion per year [8]. The greatest sources of expenses are prescription drugs which constitute \$13.3 billion in spending, dental care which amounts to \$11.5 billion, and preferred hospital accommodation which accounts for \$4.9 billion [8]. In 2010, households in Canada paid an average of \$2,194 on out-of-pocket expenses, ranging from \$1,816 in Ontario to \$2,680 in British Columbia [31].

### **Health Research and Data Collection**

Evidence-based medicine, or the use of the best evidence in patient care, is included as an important component of medical practice and health care professional training in Canada [32, 33]. The cornerstone of evidence-based medicine is health research. The federal government funds research initiatives in Canada through agencies such as the Canadian Institutes for Health Research (CIHR) which was established with the passing of the *Canadian Institutes of Health Research Act* in 2000, replacing the Medical Research Council [34]. CIHR

funds 14,100 researchers and trainees across Canadian institutions and organizations [35]. It funds research in four areas which are biomedical, clinical, health systems services, and social, cultural, environmental and population health [36].

Aside from clinical research, health information can be collected to evaluate the health care system and identify areas of need and development. In Canada, the federal government provides statistics through Statistics Canada [37]. Statistics Canada conducts a population census every five years and administers 350 cross-sectional and longitudinal surveys to provide statistics on the Canadian population, health, economy, and resources [37]. Micro-data from Statistics Canada can be accessed through secure Research Data Centres located at university centres across the country in accordance with the *Statistics Act* [38].

As the majority of the population in each province are covered by the universal health care system, health data from hospitals and billing are being collected and can be used to monitor the health care system and for research purposes. The Canadian Institute for Health Information collects health care data across Canada in a standardized way, which may be analyzed by researchers [39]. Data are collected under the *Personal Information Protection and Electronic Documents Act* and provincial data privacy acts, and can be obtained in anonymized form for research purposes [40]. One example is the Institute for Clinical Evaluative Sciences (ICES) in Ontario, through which researchers can get access to population health data including hospitalizations, ambulatory care visits, physician visits, and drug benefit claims [41].

### Further Considerations

The Canadian health care system will face multiple challenges in the coming years as a result of the burden of chronic conditions, population aging, and increasing global travel. The Canadian health care system is facing these challenges by engaging on a number of strategies. Some of these include reductions in wait times for medical services, establishing long-term care strategies, and responsiveness to global pandemics. Future research and monitoring of population health in Canada can be established by interlinking existing provincial databases and collecting data using uniform methodologies. In addition, international research collaborations can be further developed to allow health care systems from around the world to learn from their experiences and to foster the sharing of health research.

### Notes

<sup>1</sup> Self-reported survey sent to all licensed physicians in Canada [28]. The survey frame was created using information from the Canadian Medical Association, College of Family Physicians of Canada, and Royal College of Physicians and Surgeons of Canada membership lists. The response rate was 18% and the responses were weighted to represent the population of physicians [28].

<sup>2</sup> Physicians working in a privately owned practice are reimbursed for patient services by the provincial or territorial governments as in accordance with the Canada Health Act, physicians cannot bill patients for services [4].

### References:

1. Health Canada, *Health Care System*. <http://www.hc-sc.gc.ca/hcs-sss/pubs/system-regime/2011-hcs-sss/index-eng.php>, 2012. September 20, 2012 (access 20. 09. 2012).
2. Health Canada, *Canada's Health Care System*. Dates articles were accessed: [http://publications.gc.ca/collections/Collection/H88-3-30-2001/pdfs/other/hcs\\_e.pdf](http://publications.gc.ca/collections/Collection/H88-3-30-2001/pdfs/other/hcs_e.pdf), 1999. Sept. 20. 2012
3. Statistics Canada, Table 051-0001 – *Estimates of population, by age group and sex for July 1, Canada, provinces and territories, annual (persons unless otherwise noted)*, CANSIM (database), 2012.
4. Health Canada, *Canada Health Act Annual Report 2010–2011*. <http://www.hc-sc.gc.ca/hcs-sss/pubs/cha-lcs/2011-cha-lcs-ar-ra/index-eng.php>, 2012 (access 20. 09. 2012).
5. Esmail N., Walker M., *How Good is Canadian Health Care? 2008 Report: An International Comparison of Health Care Systems*. Studies in Health Care Policy, Fraser Institute, 2008.
6. Sutcliffe S.B., *A review of Canadian health care and cancer care systems*. „Cancer” 2011; 117(Suppl. 10): 2241–2244.
7. Esmail N., Palacios M., *The price of public health care insurance in 2011*. „Fraser Forum” 2012; 11/12: 5–7.
8. Canadian Institute for Health Information, *National Health Expenditure Trends, 1975 to 2011*. [https://secure.cihi.ca/free\\_products/nhex\\_trends\\_report\\_2011\\_en.pdf](https://secure.cihi.ca/free_products/nhex_trends_report_2011_en.pdf), 2011 (access 24. 09. 2012).
9. Parliament of Canada, *The Health of Canadians – The Federal Role Final Report - Volume Six: Recommendations for Reform*. <http://www.parl.gc.ca/Content/SEN/Committee/372/SOCI/rep/repoct02vol6part1-e.htm>, 2002. (access 24.09. 2012).
10. Service Ontario, *Private Hospitals Act*. [http://www.e-laws.gov.on.ca/html/statutes/english/elaws\\_statutes\\_90p24\\_e.htm](http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90p24_e.htm), 2010 (access 24. 09. 2012).
11. Madore O., Tiedemann M., *Private Health Care Funding and Delivery under the Canada Health Act*. Library of Parliament, Parliament of Canada. <http://www.parl.gc.ca/Content/LOP/ResearchPublications/prb0552-e.pdf>, 2005 (access 24. 09. 2012).
12. Association of Canadian Academic Healthcare Organizations, *Who We Are*. [http://www.achao.org/?who\\_we\\_are](http://www.achao.org/?who_we_are), 2012 (access 20..09. 2012).
13. Canadian Agency for Drugs and Technologies in Health, *Activity-based Funding Models in Canadian Hospitals*. <http://www.cadth.ca/en/products/environmental-scanning/health-technology-update/ht-update-12/activity-based-funding-models-in-canadian-hospitals>, 2012 (access 17. 09. 2012).
14. Canadian Health Services Research Foundation, *Are Hospital Funding Mechanisms in Canada Designed to Provide Efficient Care? „Evidence-Informed Options for Hospital Funding”*, 2010.

15. Canadian Institute for Health Information, *Hospital Cost Drivers Technical Report*. [http://www.cihi.ca/CIHI-ext-portal/pdf/internet/HOSPITAL\\_COSTDRIVER\\_TECH\\_EN](http://www.cihi.ca/CIHI-ext-portal/pdf/internet/HOSPITAL_COSTDRIVER_TECH_EN), 2012 (access 19. 09. 2012).
16. Canadian Institute for Health Information, *The Cost of Acute Care Hospital Stays by Medical Condition in Canada, 2004–2005*. [https://secure.cihi.ca/free\\_products/nhex\\_acutecare07\\_e.pdf](https://secure.cihi.ca/free_products/nhex_acutecare07_e.pdf), 2008 (access 19. 09. 2012).
17. Paris V., Docteur E., *Pharmaceutical pricing and reimbursement policies in Canada*. OECD Health Working Papers, 2007.
18. Khoury H., O’Neil B., Wagner M., Welner S. *Canada – Pharmaceuticals*. International Society for Pharmacoeconomics and Outcomes Research. <http://www.ispor.org/htaroadmaps/CanadaPharm.asp>, 2011 (access 19. 09. 2012).
19. Canadian Agency for Drugs and Technologies in Health, *About CADTH*. Dates articles were accessed: <http://www.cadth.ca/cadth>, 2012. Sept. 24, 2012
20. Office of the Auditor General of Canada, *Chapter 4 – Management of Federal Drug Benefit Programs*. Report of the Auditor General of Canada. Dates articles were accessed: [http://www.oag-bvg.gc.ca/internet/English/parl\\_oag\\_200411\\_04\\_e\\_14908.html](http://www.oag-bvg.gc.ca/internet/English/parl_oag_200411_04_e_14908.html), 2004. Sept. 20, 2012
21. Pomey M.-P., Morgan S., Church J., Forest P.-G., Lavis J.N., McIntosh T., Smith N., Petrela J., Martin E., Dobson S., *Do Provincial Drug Benefit Initiatives Create an Effective Policy Lab? The Evidence from Canada*. „Journal of Health Politics, Policy and Law” 2010; 35(5): 706–742.
22. Fraser Group/Tristat Resources, *Drug Expense Coverage in the Canadian Population: Protection from Severe Drug Expenses*. [http://www.frasergroup.com/downloads/severe\\_drug\\_e.pdf](http://www.frasergroup.com/downloads/severe_drug_e.pdf), 2002 (access 24. 09. 2012).
23. Association of Faculties of Medicine of Canada, *Information About Canadian Faculties of Medicine 2011/12*. Office of Research and Information Services, AFMC. <http://www.afmc.ca/pdf/2011-12%20Class%20Size.pdf>, 2011 (access 24. 09. 2012).
24. Association of Faculties of Medicine of Canada, *Admission Requirements of Canadian Faculties of Medicine: Admission in 2013*. [http://www.afmc.ca/pdf/2013\\_ad\\_bk.pdf](http://www.afmc.ca/pdf/2013_ad_bk.pdf), 2012 (access 24. 09. 2012).
25. Health Canada, *Guidelines for the Preparation of an Action Plan for Medical Licensure in Canada*. [http://www.hc-sc.gc.ca/hcs-sss/hhr-rhs/postgrad-postdoc/action\\_plan-eng.php](http://www.hc-sc.gc.ca/hcs-sss/hhr-rhs/postgrad-postdoc/action_plan-eng.php), 2012 (access 19. 09. 2012).
26. Professional Association of Internes & Residents of Ontario, *Continuing Medical Education (CME)/Continuing Professional Development (CPD) Credits and System*. <http://www.pairo.org/Content/Default.aspx?pg=1331>, 2011 (access 24. 09. 2012).
27. Canadian Institute for Health Information (CIHI), *Physician supply still growing faster than Canadian population*. [http://www.cihi.ca/cihi-ext-portal/internet/en/document/spending+and+health+workforce/workforce/physicians/release\\_15nov12](http://www.cihi.ca/cihi-ext-portal/internet/en/document/spending+and+health+workforce/workforce/physicians/release_15nov12), 2012 (access 19. 09. 2012).
28. National Physician Survey (NPS), *2010 National Physician Survey Results*. <http://nationalphysiciansurvey.ca/wp-content/uploads/2012/05/NPS2010-National-Binder.pdf>, 2010 (access 19. 09. 2012).
29. Esmail N., *Canada’s physician supply*. „Fraser Forum” 2011; 3/4: 12–16.
30. Statistics Canada, Table 105–0501 – Health indicator profile, annual estimates, by age group and sex, Canada, provinces, territories, health regions (2011 boundaries) and peer groups, occasional, CANSIM (database), 2012.
31. Statistics Canada, *Survey of Household Spending, 2010*. Dates articles were accessed: <http://www.statcan.gc.ca/daily-quotidien/120425/dq120425a-eng.htm>, 2012 (access 20. 09. 2012)
32. Wyer P.C., Keitz S., Hatala R., Hayward R., Barratt A., Montori V., Woollorton E., Guyatt G., *Tips for learning and teaching evidence-based medicine: introduction to the series*. „CMAJ” 2004; 171(4): 347–348.
33. Sackett D.L., Rosenberg W.M.C., Gray J.A.M., Haynes R.B., Richardson W.S., *Evidence based medicine: what it is and what it isn’t*. „BMJ” 1996; 312: 71–72.
34. Canadian Institutes for Health Research (CIHR), *Milestones in Canadian Health Research*. <http://www.cihr-irsc.gc.ca/e/35216.html>, 2012 (access 19. 09. 2012).
35. CIHR, *About us*. <http://www.cihr-irsc.gc.ca/e/37792.html>, 2012 (access 19. 09. 2012).
36. CIHR, *Funding Overview*. <http://www.cihr-irsc.gc.ca/e/37788.html>, 2012 (access 19. 09. 2012).
37. Statistics Canada, *About us*. <http://www.statcan.gc.ca/about-apercu/about-apropos-eng.htm>, 2012 (access 20.09, 2012).
38. Statistics Canada, *The Research Data Centres Program*. <http://www.statcan.gc.ca/rdc-cdr/index-eng.htm>, 2012 (access 20. 09. 2012).
39. CIHI, *Vision and Mandate*. <http://www.cihi.ca/CIHI-ext-portal/internet/EN/SubTheme/about+cihi/vision+and+mandate/cihi010703>, 2012 (access 24. 09. 2012).
40. Cavoukian A., *Frequently Asked Questions: Personal Health Information Protection Act*. Information and Privacy Commissioner Ontario. <http://www.ipc.on.ca/images/Resources/hfaq-e.pdf>, 2005 (access 24. 09. 2012).
41. Institute for Clinical Evaluative Sciences, *Examples of ICES data use*. [http://www.ices.on.ca/webpage.cfm?site\\_id=1&org\\_id=26&morg\\_id=0&gsec\\_id=5314&item\\_id=5316](http://www.ices.on.ca/webpage.cfm?site_id=1&org_id=26&morg_id=0&gsec_id=5314&item_id=5316), 2011 (access 25. 09. 2012).
42. Brock University Map Library Controlled Access, *Canada map [computer file]*. Brock University Map Library: St. Catharines, Ontario. [http://www.brocku.ca/maplibrary/maps/outline/North\\_America/canada.jpg](http://www.brocku.ca/maplibrary/maps/outline/North_America/canada.jpg), no date (access 25. 09. 2012).