

## Health Care in Canada 2001: Launch a Success

At a press conference held in early May, CIHI launched its second annual report, *Health Care in Canada 2001*, resulting in coast-to-coast media coverage. Members of the panel (from left to right) included CIHI Board Chair **Michael Decter**, **The Hon. Allan Rock**, Federal Minister of Health, **The Hon. Gary Mar**, Alberta Minister of Health and Wellness, CIHI Board member **Kathleen Weil** and CIHI's Director of Health Reports and Analysis **Jennifer Zelmer**. The report, as well as a brochure featuring the key findings, are now available from CIHI's Web site and can be downloaded free-of-charge: [www.cihi.ca/HealthReport2001/toc.shtml](http://www.cihi.ca/HealthReport2001/toc.shtml).



## New System Launched by CIHI to Measure Effectiveness of Rehabilitation Services

Last month, the Canadian Institute for Health Information (CIHI) launched its national reporting system designed to provide information to measure the effectiveness of rehabilitation services for adult inpatients in Canada. The announcement was made in Halifax during the annual conference of the Canadian Association of Physical Medicine and Rehabilitation and RehabNET.

"CIHI's new reporting system means that we will be able to collect information that will help us to better serve adult rehabilitation inpatients and provide reliable and valid evidence on which we can base decisions," Dr. R. Lee Kirby told over 75 delegates attending the launch event. He is a member of CIHI's national rehabilitation expert working group. "This is a comprehensive made-in-Canada measurement system that I believe will be second to none."

According to CIHI's Director of Health Services Information, Louise Ogilvie, "compared to acute care hospitals, there has been relatively little information available for other health care facilities and programs. However, this new system represents an important milestone in filling in the information gaps in the area of rehabilitation services."

## New Classification Coding Reaches from Coast to Coast

Five provinces and one territory have now become part of the staggered implementation of ICD-10-CA/CCI in fiscal year 2001/2002 including Newfoundland, Prince Edward Island, Nova Scotia, Saskatchewan, British Columbia and the Yukon. Check page 4 for more.

## Contents

Board of Directors of the Canadian Institute for Health Information .....	2
Message from the President .....	2
CIHI Privacy Secretariat – Putting Principles into Action .....	3
ICD-10-CA/CCI Update .....	4
Lori Driscoll, CCHRA(C), First Recipient of Joady Murray Memorial Award .....	4
CIHI Reports Moderate Rise in Registered Nurses Workforce, Fewer RNs Working on Casual Basis, More Working Full-time .....	5
e-Health 2001: A Great Success .....	6
Hospital Report 2001: Acute Care .....	7
CIHI Analyses and Reports .....	8

## Board of Directors of the Canadian Institute for Health Information

### Chair

#### Mr. Michael Decter

Lawrence Decter Investment Counsel Inc.  
(Toronto, Ontario)

### REGION 1—British Columbia and Yukon

#### Ms. Leah Hollins

Deputy Minister, B.C. Ministry of Health Services  
(Victoria, British Columbia)

#### Mr. Rick Roger

Chief Executive Officer, Capital Health Region  
(Victoria, British Columbia)

### REGION 2—Prairies, NWT and Nunavut

#### Ms. Sheila Weatherill

President and CEO, Capital Health Authority  
(Edmonton, Alberta)

#### Dr. Brian Postl

Chief Executive Officer, Winnipeg Regional  
Health Authority  
(Winnipeg, Manitoba)

### REGION 3—Ontario

#### Dr. Michael Guerriere

Chairman and CEO, HealthLink Clinical Data  
Network Inc. (Toronto, Ontario)

#### Mr. Daniel Burns

Deputy Minister, Ministry of Health and  
Long-Term Care  
(Toronto, Ontario)

### REGION 4—Québec

#### Mr. Terry Kaufman

Directeur général, CLSC Notre-Dame de  
Grâce/Montréal Ouest (Montréal, Québec)

#### Ms. Kathleen Weil

Chair, Board of Directors  
Régie régionale de la santé et des Services  
sociaux de Montréal Centre  
(Montréal, Québec)

### REGION 5—Atlantic

#### Dr. Thomas F. Ward

Deputy Minister, Nova Scotia Department  
of Health (Halifax, Nova Scotia)

#### Mr. Rory Francis

Deputy Minister of Health and Social Services,  
Province of Prince Edward Island  
(Charlottetown, Prince Edward Island)

### Canada-at-Large

#### Mr. Tom Closson

Vice Chair of CIHI Board  
President and CEO, University Health Network  
(Toronto, Ontario)

#### Dr. Cameron Mustard

Scientific Director, Institute for Work & Health  
(Toronto, Ontario)

### Health Canada

#### Mr. Ian Green

Deputy Minister of Health (Ottawa, Ontario)

### Statistics Canada

#### Dr. Ivan Fellegi

Chief Statistician of Canada (Ottawa, Ontario)

## Message from the President

# Technology in Health Care—Canadian Initiatives Moving Forward

The recent *e-Health 2001* conference in Toronto gave us an exhilarating tour of the potential for technology in health care. While there are obstacles en route to the brave new world of medicine and technology, the powerful and far-reaching capabilities in delivering quality health services across Canada inspire innovation.



Those who attended the conference can easily visualize the full potential in telehealth, telemedicine and the rapid accurate availability of health information both by consumers and health care professionals. Canada is already taking steps to install the necessary infrastructure and technology educators are collaborating to develop relevant educational programs. This issue of *Directions* has dedicated significant space to content about the conference and I urge you to explore these articles.

The keynote speakers and presenters at *e-Health 2001* offered messages of import to the e-health community, health care workers and Canadians in general. The federal government has taken a courageous step in allocating \$500 million to Canada Health Infoway Inc. (CHI)/Inforoute Santé du Canada inc.—a major step towards the development of health infrastructure reported upon by Dr. Duncan Sinclair, CHI Chair. This initiative followed last September's First Ministers' Agreement on Health, where a commitment was made to work together to strengthen the health infrastructure in Canada.

Canadian achievements towards making health information accessible are in sharp contrast to the barriers that remain in areas of the world such as Latin America and the Caribbean (LA&C). A keynote presenter, Dr. Rodriguez, pointed out in his e-health presentation that information technology is only as powerful as the number of people who can use it—sadly this is a limitation within countries such as LA&C. In sharp contrast, the Canadian reality is that more people are on-line than off-line.

One new feature of the conference, noted with optimism by Dr. Michael Guerriere, *e-Health 2001* Program Chair, was the addition of a new track added this year on venture capital and e-health start-up companies. Canada has the opportunity to not only capitalize on the local intellectual innovations but also to exploit these developments to nurture a significant Canadian presence in the international health informatics industry.

The future for health informatics in Canada is looking extremely encouraging. The reality is that there will be hurdles to leap including the availability of resources and the overall well-being of the health care system.

CIHI and Canada's Health Informatics Association (COACH) will continue the tradition of bringing together the key players in the e-health Canadian and international community by presenting *e-Health 2002* which will take place in Vancouver, April 20-23, 2002. Plan to be there, plan to be part of Canada's e-health future.

Richard C. Alvarez  
President and CEO

## CIHI Privacy Secretariat – Putting Principles into Action

"Privacy and data protection are critical to CIHI's mandate," says Joan Roch, Manager of the Institute's Privacy Secretariat. "For that reason, CIHI places particular emphasis on its privacy program." This was reflected in organizational changes announced by Richard Alvarez, CIHI's President and Chief Executive Officer, earlier this year. CIHI established a privacy secretariat, reporting directly to the CEO, and also named Dr. David Flaherty as its Chief Privacy Advisor.



David Flaherty, CIHI's Chief Privacy Advisor and Joan Roch, Manager of CIHI's Privacy Secretariat work together as part of the Institute's new Privacy Secretariat to ensure privacy and data protection.

David Flaherty, a former information and privacy commissioner, is an expert in the application of fair information practices and privacy laws, whose independence as a long-time privacy scholar and privacy advocate is widely respected. The Chief Privacy Advisor role includes:

- advising on appropriate privacy and data protection practices,
- overseeing CIHI's ongoing compliance with its privacy principles and policies, and
- adjudicating privacy complaints that are not settled within CIHI.

The Privacy Secretariat provides the leadership for the Institute's privacy program. For example, as part of the Roadmap Initiative, the secretariat is undertaking a major review of data protection practices, including updating privacy and confidentiality policies that will be going to CIHI's Board. The review involves analysis of new and emerging privacy legislation in all jurisdictions across Canada, to make sure that CIHI carries out its mandate in a privacy sensitive manner. As part of the review, health ministries and privacy commissioners in the provinces and territories were consulted on CIHI's privacy principles and policies. This process generated valuable dialogue and as a result, ongoing consultations are being incorporated into CIHI's privacy program practices.

CIHI's Privacy Secretariat works closely with CIHI's privacy, confidentiality and security team, which has representatives from every program area at CIHI, plus information systems and administration. The team monitors CIHI's privacy practices and is involved in the multi-step review process for handling external data requests.

CIHI takes special steps to ensure that its staff members understand their obligations for confidentiality. All new employees receive a copy of *Privacy and Confidentiality of*

*Health Information at CIHI: Principles and policies for the protection of health information* (<http://www.cihi.ca/pdf/priv99.pdf>). They also sign a confidentiality pledge to abide by those policies and participate in mandatory privacy training.

CIHI has also started to prepare privacy impact assessments on both existing and developing data holdings. Completing these assessments has added to staff awareness of privacy concerns and identified ways to improve data protection.

CIHI's Chief Privacy Advisor, David Flaherty, says, "I have been impressed with CIHI's sensitivity to privacy and data protection, and its commitment to improve its practices in relation to national standards and emerging legislation."

Information on Privacy and Confidentiality of Health Information at CIHI can be found at: <http://www.cihi.ca/weare/pcsmain.shtml>

---

*continued from page 1*

With the launch of this new national system, CIHI has begun producing national comparative reports that include clinical outcome indicators. These reports and indicators will provide valuable information to assess changes in the clients' functional status outcomes, to examine access to rehabilitation facilities, and to evaluate programs and services both at the time of discharge and at follow up in the community.

"After severely disabling disorders—like stroke, head injury, spinal cord injury, bone and joint problems or amputations—many patients need long-term follow-up care. Rehabilitation services can help patients to regain and improve the basic skills (like walking, climbing stairs and talking) that they need to re-enter the community and return to their roles in society," added Dr. R. Lee Kirby.

The National Rehabilitation Reporting System (NRS) was developed following extensive consultation with professionals in the rehabilitation field and a successful pilot study conducted by CIHI several years ago.

Janice Miller, CIHI Consultant for Rehabilitation, who presented an update at the Halifax meeting stated that, "based on the results of this landmark study and the implementation steps that CIHI has taken since 2000, over 30 facilities in 6 provinces have begun implementation of the NRS. To date, CIHI has rehabilitation data for over 900 clients receiving services and has published comparative reports for 19 submitting facilities."

---

### For more information, please contact:

Janice Miller, Consultant

Tel. (613) 241-7860

Fax: (613) 241-8120

E-mail: [jmiller@cihi.ca](mailto:jmiller@cihi.ca)

Web site: [www.cihi.ca/Roadmap/Adult\\_Inpat/start.shtml](http://www.cihi.ca/Roadmap/Adult_Inpat/start.shtml)

## ICD-10-CA/CCI Update

A coast-to-coast blitz involving five provinces and one territory resulted in over 820 participants completing a distance education learning package and attending two-day ICD-10-CA/CCI workshops in preparation for electronic coding. CIHI classification staff conducted 62 computer lab workshops with the generous assistance of provincial trainers selected by their own ministries of health.

"I find the new ICD-10-CA/CCI coding classification a definite step in the right direction..." commented Margie Tait, a health information professional from the Central Newfoundland Regional Health Centre who has started to use the new coding system. "The detail that can now be gathered has improved tremendously as compared to the ICD-9 version. The codes in ICD-10-CA/CCI reflect many of the immense changes in health care practices in Canada over the past decade."

To round out education, a final post-workshop package containing 10 case studies has been sent out and must be completed over the summer. For those provinces that are beginning to collect data using ICD-10-CA and CCI next year, the same three educational modules will be offered. These modules include a self-learning package, a two-day workshop, and post-workshop case studies.

### New Workshops for 2001

CIHI is supporting new classification standards through the development of two additional workshops. *Exploring ICD-10-CA and CCI* is for data users such as clinicians, researchers, utilization analysts and health care administrators interested in increasing their understanding of how these new classifications can improve health information analysis. A non-coding background is assumed. The *ICD-10-CA and CCI Refresher* is for clinical coders and data quality analysts interested in deepening their acquaintance with coding concepts and guidelines by coding real case summaries. For more information, please contact [ccicd-10@cihi.ca](mailto:ccicd-10@cihi.ca).

### XML Makes Distribution and Maintenance Easier

Extensible markup language (XML) was used to produce both the hard copy and the electronic (CD-ROM) from the CIHI classification databases, streamlining the production of multiple formats and simplifying the continued maintenance of standards over time. XML is an internationally accepted and secure standard for messaging templates.

This is the first-ever publication of ICD-10 by any country using such advanced e-technology. All hospital clients have received copies of both the CD-ROM and the five-volume paper set of the two classifications (including coding guidelines).

For those clients interested in printing extra copies, a PDF version of ICD-10-CA and CCI—all 5 volumes—may be found

in July, on the CIHI Order Desk Web site under "Products," "Disease/Intervention." Core clients may download this version free of charge after supplying their client identification. From 5 to 30 minutes are required to download the files, depending on computing speed. For further information, contact the CIHI Order Desk at: [orderdesk@cihi.ca](mailto:orderdesk@cihi.ca).



### Coding Queries On-line

In May, CIHI successfully pilot tested an on-line database for coding queries. This initiative is expected to improve data consistency and quality by making queries and answers available in real time to all clients across Canada. Queries may now be submitted on-line. To register, visit <http://www.cihi.ca>.

## Lori Driscoll, CCHRA(C), First Recipient of Joady Murray Memorial Award

In May 2001, at the Canadian Health Record Association's Annual Conference in Edmonton, Alberta, Lori Driscoll received the first-ever Joady Murray Memorial Award. The award was established by the Canadian Institute for Health Information (CIHI) and the Canadian Health Record Association (CHRA) to honour the life and work of Joady Murray.

As the first recipient of this award, Lori Driscoll has without a doubt set the bar for all future award winners through her commitment to lifelong learning and her significant contributions to the advancement of the health information profession.

Individuals and groups who wish to ensure that this award continues in perpetuity are

invited to send donations to: Joady Murray Memorial Award c/o CHRA, 1090 Don Mills Road, Suite 501, Don Mills, Ontario M3C 3R6.



Barb McLean (L), CIHI representative, presents the Joady Murray Memorial Award to first time recipient, Lori Driscoll, CCHRA(C).

# CIHI Reports Moderate Rise in Registered Nurses Workforce, Fewer RNs Working on Casual Basis, More Working Full-time

The latest statistics on Canada's registered nurses workforce, released in May by the Canadian Institute for Health Information (CIHI), show a moderate increase in the number of registered nurses employed in nursing with fewer employed on a casual basis and a greater percentage working full-time.

In 2000, there were 232,412 registered nurses employed in nursing in Canada compared to 228,450 in 1999, a moderate rise of 1.7%. National growth over the past year was driven by increases in Ontario and Québec, where the number of registered nurses employed in nursing increased by 4.5% and 1.3%, respectively. The registered nursing workforce also rose in the Northwest Territories (12.8%), Newfoundland (2.5%), Prince Edward Island (1.9%), Nova Scotia (1.0%), and Alberta (0.6%).

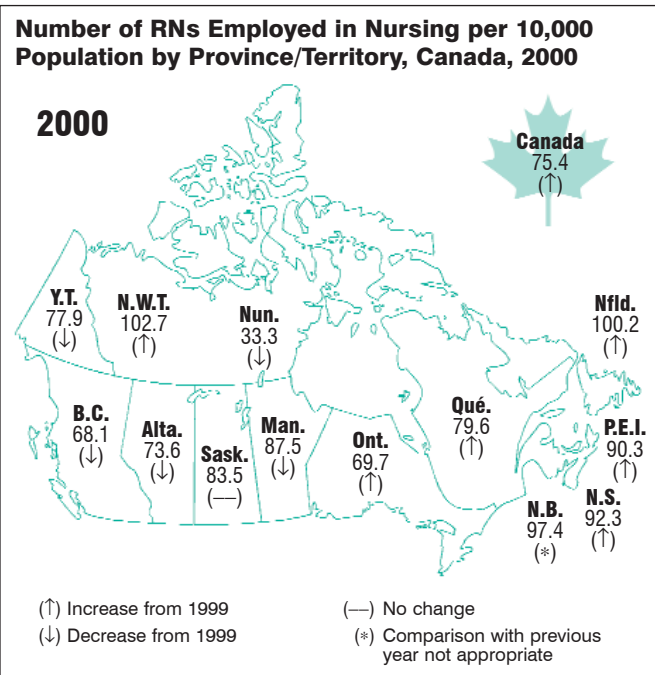
For the first time in six years, the number of registered nurses employed in nursing per 10,000 population rose slightly, from a national rate of 74.6 in 1999 to 75.4 in 2000. The Northwest Territories (102.7) and Newfoundland (100.2) led the country, while Ontario (69.7), British Columbia (68.1), and Nunavut (33.3) had the fewest number of registered nurses per 10,000 population.

"This is a good news story for Canada. We are seeing more nurses employed in the profession and we have seen a modest shift to more full-time employment," explains Linda O'Brien-Pallas, RN, PhD, an advisor to CIHI. "However, the number of registered nurses is still lower than levels in the early 1990s."

The statistics released are from the CIHI publication, *Supply and Distribution of Registered Nurses in Canada, 2000*, and are derived from the first six months of provincial/territorial nursing registration data. Minor variations between CIHI data and year-end provincial/territorial data will exist due to differences in the reporting period and CIHI's removal of interprovincial duplicates. Nunavut data were derived from data provided by the Northwest Territories Registered Nurses Association, as Nunavut does not have a separate regulatory authority for registered nursing.

For more information covering the general trends in national, provincial/territorial distribution, age, and positions held by nurses see the media release at <http://www.cihi.ca/medr/23may2001.shtml>.

To order a copy of the report, please contact CIHI's Order Desk at (613) 241-7860 or through our On-line Order Desk.



Source: RNDB/CIHI

**Number of RNs Employed in Nursing by Province/Territory, Canada, 1994-2000**

	1994	1995	1996	1997	1998	1999	2000	% change '94-'00
Nfld.	5,178	5,203	5,261	5,210	5,340	5,264	5,394	+4.2
P.E.I.	1,162	1,195	1,340	1,281	1,277	1,232	1,255	+8.0
N.S.	9,157	8,863	8,738	8,587	8,525	8,615	8,699	-5.0
N.B.	7,610	7,545	7,458	7,412	7,456	7,710	7,376	n/a
Qué.	61,218	62,058	57,291	59,160	56,825	57,980	58,750	-4.0
Ont.	81,301	79,410	80,198	78,067	78,825	78,197	81,679	+0.5
Man.	10,083	10,216	10,490	10,510	10,185	10,211	10,051	-0.3
Sask.	8,491	8,447	8,508	8,456	8,455	8,553	8,543	+0.6
Alta.	21,860	21,287	20,751	21,428	21,988	22,044	22,172	+1.4
B.C.	27,575	27,868	28,348	28,974	28,004	27,911	27,730	+0.6
Y.T.	203	217	228	252	241	243	237	+16.7
N.W.T.	421	433	415	367	410	384	433	+2.9
Nun.	134	126	136	109	120	106	93	-30.6
<b>Canada</b>	<b>234,393</b>	<b>232,868</b>	<b>229,162</b>	<b>229,813</b>	<b>227,651</b>	<b>228,450</b>	<b>232,412</b>	<b>-0.8</b>

Source: RNDB/CIHI

Notes: CIHI data will differ from provincial/territorial data due to the CIHI collection period, the removal of interprovincial duplicates, and provincial/territorial data cleaning at year-end.

Nunavut data were derived from data provided by the Northwest Territories Registered Nurses Association, as Nunavut does not have a separate regulatory authority for registered nursing.

## e-Health 2001: A Great Success

This year's *e-Health 2001* conference was a resounding success, attracting over 1,200 participants to Toronto for this premier health informatics event held in late May. Co-sponsored by the Canadian Institute for Health Information (CIHI) and COACH—Canada's Health Informatics Association—speakers and workshop leaders shared their expertise on a wide variety of topics related to the world of e-health.

In the opening keynote address, Dr. Roberta Bondar challenged delegates to "think outside the box," to take risks and be creative in finding solutions. As the first Canadian woman to fly in space, Dr. Bondar shared her experiences, noting that "space is a great place to do research."

Sending a person into space is an extraordinary challenge, one that requires ongoing monitoring of the astronaut's vital signs as well as the environment. Capturing data on the changes that occur in the body helps people to understand the impact of gravity. And Dr. Bondar points out that technology has played a key role in this monitoring process.

However, she added that designing and producing monitoring devices for use in space poses a unique challenge since the astronauts are bringing *earth equipment* to operate in space without the benefit of test pilots. "How many of you have taken software to a new place and have had it run perfectly?" she asked the audience. "The whole issue of developing technologies is to solve problems before they happen (this is especially true in space). We need massive brain power in order to be creative and solve these problems."

### Improving Health Information in Canada - A Must!

The first full day of sessions, held on Sunday, May 27, began with a keynote address by Dr. Duncan Sinclair, a Professor Emeritus and former Dean of both Medicine and Arts and Science at Queen's University in Kingston, Ontario. Dr. Sinclair also chaired Ontario's Health Services Restructuring Commission throughout its time in office. "All stakeholders agree on the need for an integrated health information management system," he told delegates, providing an overview of the Canada Health Infoway Inc. (CHI).

This is a newly-established not-for-profit corporation endorsed by the federal, provincial, and territorial governments and funded by an initial grant of \$500 million.

According to Dr. Sinclair, CHI's objectives are threefold: to develop mechanisms, such as hotline services and consolidated Web sites, to enable health care consumers to access health information they can use; to facilitate the work of health care providers through technology and sound business practices; and to create a unified network of electronic

health records across the continuum of care, "an absolute guarantee of confidentiality and security" being a precondition for this last objective.

### Other Plenary Sessions Examined e-Health Issues

On Monday, May 28, Dr. Francis Lau and John Wetmore, vice-president of IBM.com, led plenary sessions. Dr. Lau spoke on the future of health informatics while Mr. Wetmore shared his experiences with delegates on e-business, expressing concern that the health care sector is not yet taking

advantage of the possibilities available through technology. He urged the e-health community to direct creative energy towards developing partnerships with other institutions and the private sector and to develop adequate infrastructure meeting the challenges of e-business. He

noted that the infrastructure must be open and flexible, reliable and secure.

On Tuesday, May 29, Matt Anderson, the CIO for University Health Network, led the audience through an informative session on the ABCs of being a health care CIO. He emphasized that the health care CIO must focus on identifying and building the necessary skills to do the job (including the management of human resources, change and information technology) and this includes building a management team to fill in the gaps.

### Barriers to Health Information Technology in Latin America and the Caribbean

"A health information technology infrastructure is only as powerful as the number of people who can use it," was the take-home message of Dr. Roberto Rodriguez's plenary presentation on the status of health information technology in Latin America and the Caribbean (LA&C) at *e-Health 2001*.

A regional advisor for the Pan American Health Organization and World Health Organization, Dr. Rodriguez repeatedly alluded to the "digital divide" separating the wired from the unwired throughout the developed and developing world. Referring to the "penetration," or accessibility to individual citizens, of Internet technology, he noted the disparity between the 28% figure in developed regions and the 1.6% figure in developing regions such as LA&C. Similarly, low- and middle-income people, who represent 75% of the world population and cluster disproportionately in developing countries, account for only 5% of Internet use.

"The Internet being a crucial building block of modern health information technology, such gaps mean that developing countries are at a huge disadvantage in bringing health information to the people," he said.



As if this weren't enough of a problem, Dr. Rodriguez said that even such long-established technologies as telephones have weak penetration in many LA&C regions. With the cost of a yearly subscription to a telephone service reaching up to 18% of per capita gross national product, "it's no wonder that only 11 to 12 out of every 100 LA&C residents have private telephones," he said.

This is not to say that global health information trends have gone unnoticed in LA&C. "Over the past five years, these regions have undergone a process of health care reform, including decentralization, cost containment, and increasing emphasis on accountability," said Dr. Rodriguez. "Riding on the coattails of these changes is an increasing interest in technology as a health information management tool."

For example, Brazil is now piloting a system that combines national health cards with point-of-care terminals providing access to health information. Such promising initiatives aside, however, Dr. Rodriguez said "many uncoordinated efforts" litter the current e-health scene in LA&C.

The most challenging barrier to the deployment of a health information infrastructure in LA&C, said Dr. Rodriguez, may be the region's high inequity of income distribution. The implication of this reality is that "the problem of access to technology will need to be solved through public rather than individual means." In other words, such luxuries as computers will continue to exceed the financial grasp of most individuals, and will thus need to become widely available in a variety of public institutions such as libraries and schools.

Still, Dr. Rodriguez expressed confidence that the forces of progress would overcome such barriers, in part because "LA&C has its health care roots in the Western European model."

## Canada Needs a New Model of Learning for Health Informatics

As the health care system evolves and the use of technology becomes more widespread, Canada is going to need the right people with the right skills and competencies to get the job done. And this going to be a challenge unless we take the necessary steps to expand health information education and training opportunities, says Dr. Francis Lau.

In his plenary session on the future of health informatics education in Canada, Dr. Lau noted that the demand for health informatics professionals is rising. A recent *U.S. News* story reported that by 2006, one in every six jobs would be in the health sector with informaticians among the top five specialties. A recent survey of 45 CEOs and CIOs of health care organizations showed that 59% currently have job vacancies in health informatics and 83% expect the number of positions and demand to increase over time.

Dr. Lau who is an Associate Professor and Director of the Health School of Health Information Science, at the University of Victoria, said that there is a 100% placement rate for co-op students and that enrollment in the under-

graduate program continues to grow. Until recently, the University of Victoria was the only institution to offer a four-year undergraduate program in health informatics.

Most of the current programs now available, including undergraduate, certificate and professional development programs, are delivered in the traditional way, face-to-face, on campus and full-time, says Dr. Lau. He notes that for full-time professionals seeking to upgrade or learn new skills, there is no long-distance format available.

One solution would be a Canadian School of Health Informatics. Although still a concept, Dr. Lau told delegates that this national school would take a consortium approach, bringing together educational institutions, employer organizations, professional associations and colleges, funding agencies and the intended learners. They would all work together to consider how to improve the education learning system in health informatics.

The proposed model for the Canadian School of Health Informatics would unify diverse institutional program offerings into a national infrastructure. This model would emphasize lifelong learning, and would be accessible to individual learners in all three streams of health information—practice, education and research.

Additionally, the programs will need to be relevant and accessible and must adopt flexible delivery options (such as e-learning, one-week sessions, etc.). While Dr. Lau acknowledges that the road ahead will be challenging and requires hard work, he remains optimistic about the future of health informatics education in Canada.

## Hospital Report 2001: Acute Care

This year CIHI is producing *Hospital Report 2001: Acute Care*, building on leading-edge methods developed by the University of Toronto researchers. The report is a joint initiative of the Ontario Hospital Association and the Government of Ontario. *Hospital Report 2001: Acute Care* will replicate and enhance Ontario hospital reports from previous years.

There are three reports published as a result of CIHI's work on this project. The first is the full research report, released in mid-July. The second is a public summary of the research report. This summary was distributed in several newspapers across the province. Finally, a technical report, which outlines in detail the specifications of all indicators included in the report and how to interpret the results, is available on the CIHI Web site at [www.cihi.ca](http://www.cihi.ca).

### For more information please contact:

Jennifer Shapiro  
Consultant, Health Reports and Analysis  
Tel: (416) 481-2002  
Fax: (416) 481-2950

# CIHI Analyses and Reports

## CIHI Study Reveals Growing Interest in Funding Based on Population

CIHI has released a comprehensive study examining financial management practices of hospital-based acute care services in Canada. The study, *The Financial Management of Acute Care in Canada: A Review of Funding, Performance Monitoring and Reporting Practices*, was prepared by Drs. Ian McKillop (School of Business & Economics–Wilfrid Laurier University) and George Pink (Dept. of Health Administration–University of Toronto), together with Lina Johnson (Wilfrid Laurier University). The project was co-sponsored by CIHI and the Québec Ministry of Health and Social Services. Significant cooperation was received from health departments/ministries across Canada who assisted with the collection and review of the data.

In all provinces and territories (except Nunavut and the Northwest Territories), three key areas were examined—funding methods, performance monitoring and reporting requirements.

The study found a growing interest by provincial/territorial departments/ministries of health in using population-based methods to fund health care services. Another area of interest was the development of retrospective performance monitoring methods, such as publicly-released performance indicators.

The researchers also noted that the majority of provinces have demonstrated a commitment to standardizing financial and operational data by requiring hospitals to report according to the national data standard maintained by CIHI (the MIS Guidelines).

A limited number of free copies of the report may be ordered on-line at [www.cihi.ca](http://www.cihi.ca). You may contact the CIHI Order Desk at (613) 241-7860 if you have any difficulties. It is also available in electronic (pdf) format at [http://www.cihi.ca/Roadmap/MIS\\_Guidelines/pdf/finmanAC.pdf](http://www.cihi.ca/Roadmap/MIS_Guidelines/pdf/finmanAC.pdf).

## Organ Donation Project Shows Promising Results

Earlier this year, CIHI released a report co-sponsored by Clarica entitled, *Estimating Potential Cadaveric Organ Donors for Canada and its Provinces, 1992 to 1998: A Discussion Paper*. It describes the results of exploratory research that examines a new approach to computing cadaveric organ donation rates and comparing organ donation efforts across Canada. The new approach, profiled in this report, is important because it allows more meaningful comparisons across time and between jurisdictions.

The methodology for estimating potential organ donors is based on the work of Andrew Holt and his colleagues from the Flinders Medical Centre in Australia. Potential donors were categorized on the basis of cause of death. Deaths from head injury, cerebrovascular accidents (CVA) and other causes were considered separately and then combined into a total measure or donation ratio. Given the trend of declining traumatic injuries in Canada, this method allowed donation rates among head injured, CVAs and other potential organ donor groups to be compared.

The study found that, in Canada, 15 of every 100 potential organ donors who died from head injuries, 9 of every 100 potential organ donors who died from cerebrovascular accidents (CVA) and 4.5 out of every 100 potential organ donors who died from other causes of death became organ donors during the six-year period.

Results of the provincial analyses showed that in all provinces, substantial improvements had been made over the six-year period in terms of the proportion of actual donors from among the CVA potential donor group.

This report is available in PDF format on the CIHI Web site: <http://www.cihi.ca/pdf/PotCadaveric.pdf>.

Print copies of the report may be obtained by forwarding an e-mail request to [corr@cihi.ca](mailto:corr@cihi.ca).

## CIHI directions ICIS

**CIHI Directions ICIS** is published quarterly by the Canadian Institute for Health Information (CIHI). Since 1994, this national, independent, not-for-profit organization has been working to improve the health of Canadians and the health care system by providing quality health information.

The Institute's mandate is to coordinate the development and maintenance of an integrated approach to Canada's health information system. To this end, CIHI provides accurate and timely information that is needed to establish sound health policies, manage the Canadian health system effectively and create public awareness of factors affecting good health.

Contents of this publication may be reproduced in whole or in part provided the intended use is for non-commercial purposes and full acknowledgement is given to the Canadian Institute for Health Information.

**Managing Editor:** Serge Taillon

**Editor:** Sylvia Ralphs-Thibodeau

**Contributors:** Richard Alvarez, Kim Badovinac, Terry Campbell, Karen Coghlan, Jeff Green, Karen McCarthy, Janice Miller and Joan Roch. For comments, questions or additional copies of this publication, in English or French, please contact the Editor at:



Editor, CIHI directions  
200-377 Dalhousie St.  
Ottawa, Ont. K1N 9N8

Tel.: (613) 241-7860

Fax: (613) 241-8120

E-mail: [sthibodeau@cihi.ca](mailto:sthibodeau@cihi.ca)

Web site: [www.cihi.ca](http://www.cihi.ca)

*Cette publication est également disponible en français.*