# HI directions

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## Message from the CEO



s CEO of CIHI, I must confess that the last six months have been extremely rewarding. In our journey to improve the accessibility and quality of health information in Canada, we have come to the end of a four-year initiative known as Roadmap 1, a complex and onerous undertaking between ourselves, Statistics Canada, Health Canada, and the provinces and territories. An independent evaluation was conducted by IBM Business Consulting Services-their bottom line stated that "the implementation of the Roadmap Initiative was extremely successful." IBM also reported that stakeholders believe that they are better able to

answer the questions of how healthy are Canadians and how healthy is the health care system than they could four years ago, and that "the information gets better year after year." On the internal front, the Hay Group conducted our second Employee Satisfaction Survey on 16 dimensions of a healthy work place. The results were very gratifying, indicating substantial positive variances on all measures when compared to the industry norm, derived from 500 North American organizations both from the public and private sectors.

Over the summer and fall, we were busy doing what we do best, that is, getting good health information out into the public domain. This information ranged from the health of women, the nursing staff situation and healthcare expenditures to the number of body-checking injuries in our beloved sport of hockey. Each of these releases received substantial media coverage and, in many cases, the new information garnered policy-level attention and responses from decision makers across the country.

Over the same period of time, many provincial elections took place with some yielding changes in government. All governments (new or re-elected) share one constant-the commitment to maintaining a quality health system for citizens. Hence, in that context, CIHI's task of providing relevant and timely information to assist policymakers, providers of care and the Canadian public understand some of the facts within our complex health system becomes even more essential!

In a recent article, journalist Jeffrey Simpson praised Ottawa and the provinces for creating what he referred to as the "excellent CIHI, the nation's premier provider of health statistics." Clearly, high praise given to an organization which will be 10 years young next year. However, I must quickly add that none of this success would have been possible without the enormous help and collaboration from our very many partners. In particular, a "big" thanks to Dr. Ivan Fellegi and his staff at Statistics Canada, to Health Canada, the provinces and territories and the many distinguished researchers and provider organizations across our country for their collaboration and for being such strong supporters of ours.

So what's in our future? Shortly, a new report on mothers and babies will profile trends in fertility rates, pregnancy and childbirth as well as health and health care before, during and after pregnancy. The much-awaited study on the incidence of adverse events in Canadian hospitals is scheduled to be released early in the new year. Also, the Canadian Population Health Initiative's (CPHI) first major report on improving the health of Canadians will also be

released in January.

Over the next decade, fruitful partnerships and key collaborations with established and emerging organizations will continue to be a critical success factor for us at CIHI.

While on the subject of collaboration, I would like to mention that one of the key ingredients in our success has been the partnership between our Board of Directors and administration. As CEO, I feel extremely blessed to have a Board that provides strategic direction and stewardship and then requires my team and I to execute based on an agreed upon plan. It would be tremendous to keep this governance group of senior

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As of October 1s, 2003

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President, Institute for Work & Health (Toronto, Ontario)

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### How Many MRI Scanners is Enough? Medical Imaging Report Shows 400% Increase, but Challenges Persist

**C** IHI turned its attention to MRI and other medical imaging services, with the release in September of the first-ever comprehensive report on the sector in Canada. To provide the fullest possible picture of the field, the report drew on the 2003 National Survey of Selected Medical Imaging Equipment, as well as data from Statistics Canada, provincial/territorial ministries of health, professional associations, and other sources.

"The data make for a compelling picture of the medical imaging landscape in Canada," says CIHI CEO Richard Alvarez. "But the results also show that we're still a long way from answering the obvious question, "What's the right mix of medical imaging services?"

The report documents dramatic growth in the supply of equipment, including increases of 400% in MRI machines over the past decade and 50% in CT scanners. Internationally, the report points out that Canada lagged behind the OECD median in MRI and CT machines per capita in 2001, but it also shows that countries with more machines do not necessarily produce more scans. Manitoba, for example, had about 2.6 MRI scanners per million in 2001, half the number in England. Yet Manitoba reported a higher scan rate.

"Public opinion polls, Commission reports, governments, and others continue to identify access to diagnostic services as a priority," says Richard. Data from the 2001 Statistics Canada Health Services Access Survey show that while most Canadian adults who had a non-emergency MRI, CT, orangiogram waited less than a month, about 5% waited six months or more.

In addition to access to care, the report also touches on thorny issues such as the rapid evolution of medical imaging technologies, who pays for and who provides care, the need for trained professionals to provide these services, and the appropriate use of medical imaging. "CTs and MRIs are still developing," says Richard. "There are well-established clinical guidelines for the use of some types of imaging, but limited consensus so far for others. We know that we now have a lot more machines than we did 10 years ago, but it will take some time to determine what the 'right' number and combination of machines and services is. In the meantime, we have a wealth of new information that we hope will be useful to decision-makers and planners, and will provide a foundation for further reporting."

The complete report and related interactive statistics are available at www.cihi.ca.

### Message from the CEO (cont'd)

and knowledgeable individuals together forever. Alas, nothing is forever! And even as we are deafened by the rampant rumours of our extraordinary board chair, Michael Decter, being summoned to higher office, we are faced with the departure of three other prominent board members as their terms draw to a close.

I would like to take this opportunity to thank and salute Tom Closson our Vice-Chair and founding board member for the invaluable and dedicated service that he has provided to our organization over the years. Thanks to Dr. Michael Guerriere whose advice and reason on matters of health informatics and on products of health care efficiencies have been extremely helpful and valued. Finally, I extend much gratitude to Rory Francis, our "big" contributor from the little province of PEI. To each of you, we at CIHI pledge to continue to do our best in producing "better information for better health" for years to come!

R. J. Alrang

Richard C. Alvarez, President and CEO

## **Data Quality: Mission Critical**

Maintaining the integrity and reliability of our data remains Job 1 as CIHI grows, says Caroline Heick, Director of Data Quality. "DQ is the trunk that sustains all the branches of our data, from the Discharge Abstract Database to home care and patient safety," says Caroline. "Quality remains the core of our mandate, and it's more important than ever, as our information is used to support decision-making in more and more parts of the system."

In the Fall of 2002, CIHI launched a review of its DQ strategies, aimed at developing a culture of quality within CIHI and in the broader health sector in Canada. That review led to a six-point action plan, approved by the CIHI Board in June 2003. (The full text of the study, "Earning Trust," can be found at www.cihi.ca under "Data Quality.") Many of the initiatives described below are underway, and others will unfold over the coming year, says Caroline. "With this plan in place and strongly endorsed by the Board and Executive, the focus on quality at CIHI will remain strong in the years to come. The key for us now is to drive the culture of data quality out to our staff at all levels — and beyond our walls, to strengthen the whole data supply chain. We have a clear vision of how we'll do that, and the work is well underway." For more information, contact Caroline at cheick@cihi.ca.

#### **Data Quality Action Plan**

#### 1. Foster a DQ Culture

Cultural factors will be important in achieving sustained gains in DQ.

Short-term initiatives include:

- Incorporate DQ-related objectives into employee performance management plans
- Develop corporate DQ indicators to track progress
- Establish mid-level and senior management positions dedicated to DQ
- Revitalize the internal Data Quality Coordination Committee
- · Provide education sessions on DQ issues
- Review learnings from ongoing DQ reviews of major data holdings

#### 2. Strengthen DQ Infrastructure and Capacity

Numerous strategies have been identified to strengthen DQ infrastructure and capacity at CIHI:

- Increase human resources dedicated to DQ in the 2003–2004 budget
- Review and enhance the DQ Framework
- Enhance mechanisms for collaboration and sharing of best practices across CIHI

• Foster a common base of DQ understanding and skills among analysts, managers, and other staff (eg, enhanced orientation, training programs, professional development)

#### 3. Manage the Internal Supply Chain

Both internal and external stakeholders expect CIHI to lead capacity-building to improve data quality. Specific initiatives:

- Make data available earlier, to facilitate review and feedback on quality issues from CIHI staff to data suppliers
- Increase systematic data mining to identify DQ issues
- · Strengthen feedback loops with data suppliers and users
- Explore options to clarify the relationship of related data holdings and reporting frames

#### 4. Enhance External Data Quality and Collaboration

CIHI manages data holdings to which many individuals and groups contribute. An even broader range of external stakeholders has the potential to influence the quality of data. Their active involvement is critical to long-term DQ strategies. In the short term, we will work to better understand how our stakeholders use CIHI data and how their data requirements are evolving, as a basis for longer-term initiatives:

- Enhance education programs on data standards for anyone who generates data (including clinicians)
- Reaffirm support for provincial/territorial data
  quality committees
- Explore creative incentives to increase commitment to DQ e.g. including DQ standards in the Accreditation process; establishing 'data champions' in hospitals and health regions; forums to obtain feedback
- Investigate opportunities to engage researchers in improving data quality
- Enhance transparency to allow individual data users to determine if data is fit for its intended use
- Involve external stakeholders in evaluation of DQ for relevant data holdings
- Investigate the feasibility of specific tools such as DQ report cards to support dialogue with stakeholders

#### 5. Fast-Track Priority Projects

CIHI has established a dedicated fund to support internal DQ projects for priority areas in 2003–2004 and future years.

#### 6. Communication and Consultation

Effective communication regarding CIHI's DQ plans and progress achieved is essential;

• CIHI has developed and begun implementing a detailed internal and external communication strategy.

# DATAQUALITY

## **CPHI Sets the Airwaves Humming**

### Successful Release of Women's Health Study Paves the Way for "Flagship" Report

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he Canadian Population Health Initiative (CPHI) has been making quite a splash in the media in recent months. That's great news as the program gears up for the release of its Flagship report Improving the Health of Canadians this winter, says Director Carmen Connolly.

Carmen says recent reports have clearly touched a chord with Canadians, and that's a big part of what population health is all about. "We need to get people thinking and talking about the things that make us healthy --- the determinants of health --- to build the kind of national conversation that can drive change. We're going to look at some of those determinants of health in our

flagship report, Improving the Health of Canadians, in January 2004. The report lays out the major initiatives that have been taken in our four chosen priority areas: obesity, Aboriginal Peoples' health, income, and early childhood development. It also looks at the evidence to support them. We're aiming to build awareness of the policy levers available to people who want to make a difference for themselves and their IE GLOBI communities; and to do that, we have to get people talking about the whole approach of population health."

The Women's Health Surveillance Report, released in September, went a long way toward making a name for CPHI and the cause of population health. The report - co-funded with Health Canada — prompted more than 80 stories in the print media alone, and kept the research team hopping with interview requests for three days. The media release was also one of the top-10 accessed documents on the Canada Newswire, which attracts over 350,000 visits a day.

The women's health report told the story behind a simple but surprising fact: Canadian women live longer than men, but that doesn't mean they're healthier. Most of the difference comes from the fact that more men die of smoking-related diseases and other preventable factors; women are actually at higher risk than men for many serious health problems, and more of them live with disability.

The report offers the first comprehensive look at the health of Canadian women, with a focus on health risks at each stage of life, as well as for rural women and single mothers. Of particular concern were some of the findings for younger women. Forty per cent of sexually active unmarried girls age 15-17 report not using contraception consistently, with some disturbing results: girls age 15-19 have six times the average rates of chlamydia and gonorrhea infections (1,236 cases of chlamydia per 100,000 compared to a rate of 212 among women of all ages; 96 cases of gonorrhea per 100,000 compared to an average of 15 per 100,000 of all women). Women age 15-29 now account for 44.5% of new positive HIV tests among women, compared

to 14.6% in 1985. (The overall incidence of HIV among women has been steady for the past few years, while the rate is declining among men.)

CPHI has captured headlines with other work as well, including a study that children participating in unorganized activity such as

art or dance are significantly less likely to be overweight or obese - not just those who play a sport. On the other hand, watching 3-5

hours of television per day increased a child's likelihood of being obese by over 50% compared to watching 0-2 hours a day. The study of children age 7-11 by Mark Tremblay and Douglas Willms was published in the International Journal of Obesity, a research journal of the International Association for the Study of Obesity. It built on previous work by the same researchers, which showed that a child's risk of obesity is also affected by what part of the country they live in, their parents' income and level of education, and the number of siblings they have.

"Whether it's childhood obesity or women's health, CPHI is building a name for itself with high-quality research on issues that are relevant to policy makers and the public," says Carmen. "That's very much in tune with the goals for CIHI as a whole, and it's especially important in population health, where an informed conversation is the basis for positive change. I think we're seeing more of that conversation happen, and that can only be good for all of us and our communities."



## **New Executive Director for Western Canada**

Dichard Alvarez, President and CEO, is pleased to announce the appointment of Anne McFarlane as CIHI's Executive Director, Western Canada effective October 1, 2003.

Ms. McFarlane will enhance CIHI's presence in the West, working to ensure that the Institute's products and services

reflect the needs of the our western provinces, and identifying new business opportunities.

Along with an MSc in Community Health and Epidemiology, Ms. McFarlane brings more than 20 years' experience in the health and social service sectors to CIHI, including senior management and advisory roles with the BC Ministry of Health, the Saskatchewan Health Utilization and Research Commission, and the Canadian Institutes of Health Research.

## **Two New Nursing Databases Bring More Answers**

Recruiting skilled people remains a top-of-mind issue for the people who run the health care system and plan for its future needs. CIHI is working with the nursing profession and researchers to build a stronger base of national information, and to shed light on some key issues for the future of the nursing workforce.

Bringing the Future into Focus: Projecting Retirement Registered Nurses in Canada shows we're losing about 6,000 RNs, over 50 years of age, every year across the country and this picture could get

much worse. If we envision a worst case of all RNs retiring at 55, the total loss more than doubles, to 28% of all RNs in 2001.

On the other hand, if we assume we could keep 100% of nurses aged 50-54, 75% of those aged 55-59, and 50% of those aged 60-64 in the workforce, the projected losses due to early retirement could be reduced by more than half (53%) – a potential saving" of nearly 15,000 nurses.

Workforce Trends of Registered Nurses, 2002 highlights that 12.2% of registered nurses in 2002 were working in provinces other than where they were trained, with 50% of BC's RNs trained elsewhere, and 30% of Alberta's. By contrast, 96% of Quebec's RNs and 93% of Newfoundland and Labrador's were trained in their own provinces.

Another trend observed in the September report examined the differences in rates of full-time vs. part-time or casual work.

The number of RNs working full-time reached a five-year high of 54.1% in 2002, compared to 49.1% in 1998. Casual employment dropped by one-third, to 11.8% in 2002 from 18.6% in 1998. (Part-time employment increased only marginally, from 32.2% to 33.8%.)

This year CIHI released reports for the first time on the workforce trends of LPNs and RPNs. These publications offer a more complete picture of the regulated nursing workforce than has ever been available before.

> Workforce Trends of Licensed Practical Nurses in Canada, 2002 shows the number of LPNs per capita ranges from a low of 10.3 LPNs per 10,000 population in BC and 14.2 in Alberta, to a high of 51.9 in Newfoundland. The national average in 2002 was 19.1. Workforce Trends of Registered Psychiatric Nurses in Canada, 2002 explains that 42% of all active-practicing RPNs working in Psychiatric Nursing in Canada were employed in British Columbia, 21% were employed in Alberta, 19% in Manitoba and 18% in Saskatchewan.

For more information or copies of these or other reports, visit the CIHI web site at www.cihi.ca

### Landmark Study on Adverse Events is Coming this Winter!

A study led by Principal Investigators Ross Baker at the University of Toronto and Peter Norton at the University of Calgary, will provide the first national assessment of the numbers of adverse events in Canadian Hospitals. Working with four other University/regional centres (University of British Columbia, University of Alberta, McGill/University of Montreal, and Dalhousie), the research team has carried out a detailed review of charts from 20 hospitals in five provinces, including large teaching hospitals as well as smaller urban and rural sites.

CIHI and the Canadian Institutes of Health Research (CIHR) co-funded the study to determine how often adverse events happen and what types of events occur. Although similar studies have been carried out in the US, Australia, and elsewhere, there has been no detailed analysis of the broad range of adverse events in Canadian hospitals. Commenting on the study's impact, Ross Baker noted that "this research will help to shape the design of patient safety efforts in Canadian hospitals and contribute to a better understanding of where changes are needed to improve care."

CIHI and CIHR are working with the researchers on the public release of the results. "This study will give us the first national-level picture of the issue in Canada, and we hope it will support and promote the work underway to improve quality of care," says Jennifer Zelmer, CIHI's VP of Research and Analysis. "With the many initiatives in place across the country, including plans to establish a new Patient Safety Institute, I think we can look forward to substantial activity over the coming months. As in so many other areas, the process relies on good information, so we're very pleased to have launched this partnership with CIHR. And we'll continue to monitor and report on the broad issue of patient safety, with a range of new indicators in subsequent reports."

The researchers are planning to submit the study to the Canadian Medical Association Journal for publication this winter, subject to the usual peer-review process. CIHI and CIHR have been in regular contact with a wide range of stakeholder organizations since the inception of the project and will keep them up to date as it moves forward.

"We expect significant interest from the health sector, the media and the public," says Jennifer. "Our goal is a coordinated, collaborative communications strategy, working with the universities and other stakeholders. Having the facts about the level of adverse events across the country is key to improving patient safety; this study is aimed at supporting ongoing efforts to enhance patient care across the country."

CIHI and CIHR are looking forward to the successful release of the research results, likely in early 2004. For more information, visit the adverse events section of the CIHI web site or contact adverse-events@cihi.ca.



# **Upcoming Events**

#### OCT 22-23, 2003

Association des hôpitaux du Québec

#### NOV 3-5, 2003

Ontario Hospital Association Convention 2003

#### NOV 23-25, 2003

Canadian Injury Prevention and Safety Promotion Conference CIHI Speaker: Nicole de Guia

#### NOV 30-Dec 2, 2003

Canadian Home Care Conference CIHI Speakers: Madelaine Cherry, Ann Campbell

#### JAN 19-20, 2004

2004 Symposium: Enhancing Information and Methods for Health Planning and Research Sponsored by CIHI and ICES

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