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Message from the President and CEO

Disseminating the Facts on our Health Care System to Canadians

About four years ago, an Ottawa newspaper once referred to CIHI as "an obscure research agency." Last month, an editorial in a Victoria newspaper referred to CIHI as "a highly respected think-tank on medical and health issues". That observation came a few days after we released a thought-provoking report that examined policies affecting Canada's physician supply and on the heels of our third annual report on the health care system, *Health Care in Canada 2002*.

For the past three to four years, CIHI has been making steady progress to fill information data gaps in health services and to produce several important reports, including one that examined Canada's health care providers (released last November). And this year, we broke new ground by presenting data at the regional level on outcomes following hospitalization for stroke and readmission rates following admission for a heart attack, asthma, hysterectomy and prostatectomy.

That is all very well and good – but what do we expect people to do with these data? We expect people to examine the indicator information in an effort to better understand what is happening in their region. We expect people to ask questions like, Where are we doing a good job? How do we compare with our peers across Canada? What are the areas where we can make improvements? What steps do we need to take to make these improvements?

As Michael Decter, the CIHI Board Chair, noted at the news conference when we released the key findings of *Health Care in Canada 2002*, "the goal of this exercise is not to award a prize to the top region. It is to shift the whole curve so that treatment improves and death rates fall across-the-board."

We know that in regions across Canada, health care administrators, providers and others are examining the data and asking themselves some very hard questions and taking action. A few examples come to mind:

- John Malcolm, CEO for the Cape Breton Health District Authority, cited the second annual report's regional data on pneumonia and hip fractures as "the spark that started our new direction";
- For Denis Roy, Assistant Director of Public Health for the Montreal Health Region, information on indicators served as a catalyst to improved priority-setting for functions such as surgical and ambulatory care;
- In Calgary, data on fracture rates among the elderly was the inspiration for the development of a successful strategy aimed at reducing injuries in seniors.
- The University of Victoria is using last year's report as a teaching and reference tool for students studying health care administration; and
- On the international level, the Australian Institute of Health and Welfare has described our annual report as a "very useful" source of new reporting ideas.

As we go forward, CIHI will be pushing the envelope to produce more thought-provoking analyses, expanding the scope and availability of data beyond the acute care hospital sector and disseminating the results to the Canadian public. Along the way, we know that communities across Canada will be looking to this information very carefully – and in the end, we hope, use it to make informed decisions to improve health care and the health of their populations.

Richard C. Alvarez
President and CEO

CIHI Receives Honour From CANARIE

CIHI's Standards Branch, Classification Section was recognized by the prestigious CANARIE IWAY Awards program at a gala awards dinner held earlier this year. IWAY Awards (IWAY is short for Information Highway) honour individuals or groups/organizations that have made outstanding contributions to this country's world-recognized information society, celebrating innovators behind Canada's advanced broadband development and use.

CIHI received an Honourable Mention in the Application of Technology category for the development and implementation of two electronic databases for the new national classification systems: *International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Canada (ICD-10-CA)* for morbidity and mortality coding; and the *Canadian Classification of Health Interventions (CCI)* for the coding of procedures and interventions as they relate to diagnoses and health problems.

Data Quality Field Studies Forge Ahead

An updated summary of the preliminary findings from the first year of the Discharge Abstract Database (DAD) Data Quality Study are now available on CIHI's Web site (www.cihi.ca). This document provides an overview of the background and specific objectives of the DAD Data Quality Study.

Analysis of the results of the second year of the Data Quality Study, conducted last fall, are currently underway. A comprehensive report based on the analysis of the combined data from the first two years of the study will be produced this fall.

A third component of the study is to look at data submitted in ICD-10-CA/CCI via the new DAD abstract. Due to the staggered provincial/territorial implementation of the new classification standards, this portion of the study has been deferred until FY 2003/04.

In the spring FY 2002/03, CIHI will be conducting a Case Mix Complexity (CMG™/Plx™) Data Quality Study. With the implementation of ICD-10-CA/CCI, CIHI will be redeveloping the CMG/Plx Grouper. In preparation for the Grouper redevelopment, CIHI will be reviewing the complexity component of the Grouper, including Grade lists. One aspect of this review will involve the re-abstraction of actual charts.

The goal of the CMG/Plx Data Quality Study is to evaluate the data quality of selected clinical and administrative data for statistical purposes from the DAD. The primary use of the data collected will be to contribute to the assessment of the DAD data quality at a national level. The proposed objectives of the study are to:

- evaluate and measure the overall data quality of the DAD CMG Grouper variables;
- evaluate and measure the coding quality of diagnoses and interventions relevant to CMG/Plx assignment;
- facilitate the development of the ICD-10-CA/CCI CMG Grouper; and
- facilitate the ongoing development of coding guidelines for the new classification standards (ICD-10-CA and CCI).

The final report for the CMG/Plx Data Quality Study will be available in the fall 2002.

Health Care in Canada 2002: Useful Source of Health Information

Health Care in Canada 2002, a new report from the Canadian Institute for Health Information (CIHI), showcases new and updated information on health and health services in Canada and focuses on three areas in detail: outcomes of care for specific diseases and procedures, public health programs and results, and medication use and expenditures.

This year's report is the third in an annual series and was produced with assistance from Statistics Canada. The 2002 report also updates some of the topics covered in 2001. Among the findings:

- CIHI found that about one in five patients died in hospital within 30 days of being admitted with a new stroke between 1997/1998 and 1999/2000. In most cases, rates for larger health regions (those with a population of over 100,000) were similar to the overall average of 19.2%. Death rates among the regions ranged from about 15% to 35%;
- CIHI also examined in-hospital death rates for patients within 30 days of being admitted with a new heart attack over a three-year period, not just a single year. Overall, 12.6% of patients died in hospital within 30 days of being hospitalized with a new heart attack between 1997/98 and 1999/2000. Most of the 33 regions had death rates that were about the same as the overall average; however, there were regions that had lower and higher rates; and
- For the first time, CIHI reported on hospital readmission rates in the first 28 days after initial hospitalization for heart attack, asthma, hysterectomy, or prostatectomy at the regional level. Overall, 7.3% of heart attack patients and 6.4% of asthma patients had unplanned returns to hospital. Readmission rates for the two surgical procedures were lower-1% for women who had a hysterectomy and 2.5 % for men who had a prostatectomy. There were regional variations for these conditions and procedures.

Health Care in Canada 2002 also includes new and updated information on key measures of health and health care for 63 health regions in Canada, representing 90% of the country's population. These data are available in the document, *Health Indicators 2002*.

To download your complimentary copy of *Health Care in Canada 2002*, visit our Web site: www.cihi.ca. Print versions are available for a nominal fee through CIHI's on-line order desk.

CIHI Web site Gets New Look, Enhanced Features

As technology advances, it is important to ensure that communication tools keep up with the times. At CIHI, we are working to ensure that we are in step with the e-world of today. The recent redevelopment of our corporate Web site (www.cihi.ca) reflects our commitment to improving, enhancing and expanding e-services available to our clients.

"Our redeveloped site provides quicker access to CIHI information and makes it much easier for people to navigate through the site, search for documents or find statistics," explains CIHI President and CEO Richard C. Alvarez. "At the same time, we have tried to retain aspects of the original Web site that were well-received and incorporated several user-requested features. The result is that you can do more on-line today compared to what was possible on the original site."

Some of the new features found on www.cihi.ca:

Easier to navigate

- A new "related content" feature on the right-hand side of many pages helps you move easily through the site.

More information…easier to find

- "Find A Statistic" feature provides free access to selected summary data from many of our data holdings. In many cases, users can customize their queries;
- Improved search function and A-Z index; and
- All CIHI on-line services available through the same Web address.

Single-sign on to most on-line services

- Many CIHI on-line services have restricted access, and require a user name and password. The new Web site will allow clients to use a single user name and password for almost all on-line services.

To provide feedback on the enhancements or suggestions for improvements to the site, please send your comments to webcontent@cihi.ca.

Canadian Population Health Initiative (CPHI): An Update

Earlier this year, CPHI held its first CPHI Partnership Meeting in Ottawa, bringing together 125 CPHI-funded researchers and policy makers interested in the determinants of health.

Keynote speakers from the United Kingdom (U.K.), Sweden and the United States described advances in addressing health inequalities through public policies and research. The presentations outlined some ways in which population health issues can be addressed through an intersectoral approach. With effective political leadership (such as the Cabinet Council in the U.K.), strategies have been developed to eliminate child and family poverty; provide resources to support early childhood development; address unemployment, crime and fuel poverty; increase the minimum wage and resources for education; increase access to effective health care services; improve housing, address obesity; and provide resources for community/neighbourhood development.

The meeting also featured presentations by Cam Mustard, the Chair of CPHI's Council, CIHI's Vice-President of Research John Millar and CEO of the Winnipeg Regional Health Authority and CIHI Board member Brian Postl. They spoke about Canadian population health research and policy responses at national and regional levels. While Canada has been a world leader in advancing understanding about health promotion and population health, the speakers noted that Canada has begun to fall behind other countries in the application of population health knowledge to public policy.

Guest speaker André Picard, from the *Globe and Mail*, talked about the role of the media in raising public awareness and the challenges faced in getting out messages that emphasized promotion and prevention rather than focus on health care and diseases.

Three broad themes–communities and health, labour market experiences and health and children/youth and health–formed the basis for presentations by leading researchers and policy specialists that synthesized research knowledge and identified policy responses to these important population health issues. By examining the same themes in small group sessions, researchers and policy makers discussed the challenges of applying research knowledge to policy and suggested practical strategies for building closer links between researchers and policy makers in Canada.

A report of the proceedings of the CPHI Partnership Meeting will soon be available on CIHI's Web site (www.cihi.ca).

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Roundtable on Poverty and Health

CPHI hosted another national event earlier this year, a roundtable on poverty and health, involving key policy makers, researchers and representatives of non-government organizations.

The stimulus for the roundtable discussion was a draft discussion paper prepared for CPHI by co-authors David Ross and Shelly Phipps. The working draft of the paper outlined what is known about links between poverty and health, including identification of health inequalities experienced by single mothers, Aboriginal Canadians, and those living in the poorest regions of the country. A range of policy approaches that have addressed the health impacts of poverty were also identified in the paper, from macro-level income security strategies to more micro, programmatic approaches focussing on specific target groups. Key knowledge gaps the paper identified included understanding of the pathways that link poverty and health and solid evidence of effectiveness and cost-effectiveness for most interventions.

At the roundtable, participants from federal, provincial, regional and municipal governments explored with researchers and others strategies for addressing poverty and health knowledge gaps and public policy shortcomings. Solid consensus emerged around key points, including the notion that evidence linking poverty and health is compelling, and the need to characterize the optimal policy mix based on the available evidence and communicate this to decision makers.

A report of the proceedings of the roundtable, as well as the final discussion paper, will be available in July.

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CIHI Updates Privacy and Confidentiality of Health Information Principles

CIHI regularly reviews its privacy and confidentiality document, a key component of the Institute's Privacy Program, in order to keep it current with changes in the privacy landscape. A recent review of CIHI's principles, policies and procedures for data protection resulted in the release of the 2002 edition of the document, *Privacy and Confidentiality of Health Information at CIHI*.

Approved by the CIHI Board earlier this year, this document was developed by CIHI's Privacy Secretariat in conjunction with CIHI's Chief Privacy Advisor, David Flaherty. The 2002 edition is restructured in a more user-friendly and comprehensive format. It now provides a statement of each principle followed by a set of policies and corresponding procedures specifically designed to address the activities of CIHI in its role as a secondary user of health information.

"Our work to update our principles, policies and procedures represents the culmination of extensive consultation with officials from ministries of health and offices of privacy commissioners and ombudsmen across the country. The process also included input from representatives of the research and hospital communities," explains Joan Roch, who was appointed Chief Privacy Officer in early April (see separate story on this page).

This year's edition also reflects CIHI's relationship with the ministries of health and its unique role as a secondary collector and user of health information for statistical analysis and reporting purposes.

Ms. Roch also pointed out that, "CIHI's privacy principles are also now aligned with Schedule 1 of the federal *Personal Information Protection and Electronic Documents Act* (PIPEDA), with some modifications to reflect CIHI's mandate." Schedule 1, which is based on the 10 principles set out in the Canadian Standards Association *Model Code for the Protection of Personal Information*, sets a national standard for privacy protection of personal information in Canada.

Copies are now available on-line at www.cihi.ca. Print copies are available by calling the Order Desk at (613) 241-7860.

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CIHI Appoints Chief Privacy Officer

CIHI President and CEO Richard Alvarez is pleased to announcement the appointment of Joan Roch to the newly-created position of Chief Privacy Officer.

"Our appointment of a Chief Privacy Officer reflects CIHI's continued commitment to respecting the privacy of personal health information and protecting the data under our care," said Mr. Alvarez. "CIHI has had privacy principles in place since the early days of our formation. With the changing landscape, privacy has grown. We responded in 2001 by establishing a Privacy Secretariat and appointing an external advisor to assist CIHI in charting privacy issues. This most recent announcement further strengthens our position."

Ms. Roch's involvement in privacy at CIHI began shortly after she joined the organization, initially as a member of Privacy and Confidentiality Implementation Team, and more recently, as Manager of the Privacy Secretariat. In that time she has taken the lead on reviewing new and emerging privacy legislation and consultation and review of CIHI's Privacy Principles. Building on the legacy of confidentiality at CIHI and its predecessor organizations, Ms. Roch has also updated the Privacy program and kept the privacy culture at CIHI, front and centre.


Joan Roch

Prior to joining CIHI, Ms. Roch enjoyed a successful 17-year career with the Manitoba Public Service where she held increasingly senior roles within the social service sector. As Director of the Central Directorate for Manitoba's Income Security Programs, Ms. Roch was responsible for policy and program design, re-engineering, implementation and control. She also shared responsibility with the Assistant Deputy Minister for handling freedom of information requests. Privacy, confidentiality, and security were key underlying principles fundamental to all income security initiatives.

National Ambulatory Care Reporting System Enters Second Year of Operation

The National Ambulatory Care Reporting System (NACRS) is in its second operational year and submissions for year two (FY 2001/02) are near completion. The database closure date is scheduled for July 19, 2002 and CIHI anticipates that Ontario will submit over five million emergency records.

For FY 2000/01, 90% of Ontario hospitals successfully submitted their emergency activity data representing 83% of the potential reportable periods. For the first year of submissions, this response in Ontario was excellent. CIHI anticipates that 100% of the Ontario hospitals will submit their emergency activity data to CIHI for FY 2001/02.

In the past year, the NACRS team has conducted 20 training workshops throughout Ontario to introduce NACRS and to review the new ambulatory care grouping methodology, the Comprehensive Ambulatory Classification System (CACS).

The future holds new and exciting challenges for CIHI and the NACRS team. Ontario has extended its mandate for Ontario facilities for FY 2003/04. Effective April 1, 2003, all Ontario facilities will shift reporting of day surgery activity from the Discharge Abstract Database (DAD) to NACRS. A Day Surgery Task Force is currently planning for the smooth transition to NACRS. The Ministry of Health and Long-Term Care of Ontario will also be declaring which high cost clinics it intends to mandate for data collection in FY 2003/04.

The new electronic version of NACRS was launched on April 1, 2002. NACRS 2002 is ICD-10-CA/CCI compliant and more robust and flexible than the original NACRS product. Workshops are being held for all clients that will be using these NACRS data elements for collection and submission of their data in FY 2002/03. In addition to the Ontario facilities, CIHI anticipates receiving data from some facilities in British Columbia and Nova Scotia.

CIHI plans to release the first e-NACRS Web-based reports representing data received in FY 2001/02. The release of these interactive, comparative, customized and pre-generated reports is scheduled for October 2002. As provinces and territories express their interest in the adoption of NACRS, CIHI plans to accept their submissions and support their planning and implementation process.

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Advantages of Web-Based Hospital Comparative Reports (eCHAP)

CIHI has made significant progress in developing technological solutions to facilitate the electronic use of the valuable information within CIHI's Discharge Abstract Database (DAD). These data are increasingly used by health care decision-makers across Canada as a critical decision support tool to track quality and outcome measures and provide comparative information. CIHI's Web-based electronic Comparison of Hospital Activity Program (eCHAP) reporting system is a user-friendly, easily accessible, Internet based e-health decision-support tool that is available at no cost to CIHI's clients.

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New Process Makes it Easier to Access eCHAP reports

CIHI's electronic hospital reports (eCHAP) are here and accessing them is now easier. The new registration process for accessing eCHAP was released earlier this year and has been streamlined. CIHI would like to thank its clients for their patience and assistance during our evaluation of the use of electronic digital certificates that were used in order to provide secure access to eCHAP.

Feedback from clients indicated that the digital certificates were difficult to implement and maintain. As a result, CIHI has discontinued the use of digital certificates while retaining a secure access process.

Today clients can access eCHAP, by registering on CIHI's Secure Application Site, a process that takes less than five minutes and has no technical constraints. This registration process is the first step in gaining access to other CIHI electronic products. There are currently over 300 users across the country who have successfully completed this process and are currently taking advantage of the features of eCHAP. All hospitals registered for eCHAP were sent the registration instructions and may register an unlimited number of users in their hospital/facility (another advantage of discontinuing the digital certificates) at any time at no cost. The third quarter of fiscal 2001 inpatient data is now available on the eCHAP Web site. CIHI hopes to continue to use such tools to provide better health information for better health.

Additional Enhancements Made to CIHI's 2002 Case Mix Products

CIHI is pleased to offer the following updated and improved electronic CD-ROM directories for 2002:

- Case Mix Groups/Complexity (CMG™/Plx™) Directory (ICD-10-CA/CCI Version) 2002;
- Day Procedure Groups (DPG™) Directory (CCI Version) 2002;
- Comprehensive Ambulatory Classification System (CACS) Directory 2002; and
- Resource Utilization Groups (RUG) III Directory 2002.

The Discharge Abstract Database Resource Intensity Weight (RIW™) and Expected Length of Stay (ELOS) 2002 publication has also been updated and expanded. The RIW and ELOS statistics have been calculated using more recent Canadian records, improved data editing procedures and include, for the first time, cost records from British Columbia. CIHI will be introducing two new value added tables to accompany this year's publication of DAD Resource Intensity Weights and Expected Length of Stay 2002:

- LOS Analyses – Percentiles and Confidence Regions; and
- Cost Group Analyses.

The above information is provided for each CMG/Plx cell where a sufficient number of cases warrant further statistical analyses. The percentile analyses will provide users with the 10th, 25th, and 50th percentile standards for the national LOS values. The ELOS confidence regions provide a confidence measure of how well the presented ELOS statistics describe the LOS within each CMG/Plx cell.

Finally, based on a sub-sample of the cost data, the cost group analyses augments the RIW statistics by partitioning the total costs into a percentage for the following groups:

- Nursing services (including ambulatory care);
- Operating and recover room;
- Clinical laboratory;
- Diagnostic imaging;
- Other professional services;
- Traceable drugs; and
- Traceable supplies.

These tables are expected to be particularly useful to hospitals, regions and ministries of health in facilitating their understanding and increased utilization of both the ELOS and RIW statistics. An electronic copy (CD-ROM) of the Excel file including these tables and other DAD RIW and ELOS 2002 tables can be ordered free of charge by Core Plan subscribers.

If you are interested in these Case Mix products, visit CIHI's on-line Order Desk at www.cihi.ca.

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CIHI Funds Research on Nursing Practice In Rural And Remote Canada

The Canadian Institute for Health Information (CIHI) is pleased to be associated with an elite team of researchers in the publication of the report, *Supply and Distribution of Registered Nurses in Rural and Small Town Canada, 2000*. Developed by the Nature of Nursing Practice in Rural and Remote Canada Study Group, in collaboration with CIHI, this report is the first phase of a three-year investigation into the nature of nursing practice in rural and remote Canada.

Supply and Distribution of Registered Nurses in Rural and Small Town Canada, 2000 presents a demographic, employment and educational profile of registered nurses in rural and small town Canada. It was prepared in collaboration with CIHI, by the Study Group members Roger Pitblado, PhD (Co-Principal Investigator, Laurentian University), Jennifer Medves, PhD (Queen's University), Martha MacLeod, PhD (Lead Co-Principal Investigator, University of Northern British Columbia), Norma Stewart, PhD (Co-Principal Investigator, University of Saskatchewan), and Judith Kulig, DNSc (Co-Principal Investigator, University of Lethbridge) and uses data from CIHI's Registered Nurses Database (RNDB).

Copies of the report *Supply and Distribution of Registered Nurses in Rural and Small Town Canada, 2000* may be purchased on a cost-recovery basis from the CIHI on-line Order Desk (www.cihi.ca), or by contacting the CIHI Order Desk at (613) 241-7860.

For more information on the Nature of Nursing Practice in Rural and Remote Canada research project visit the Study Group Web site at http://ruralnursing.unbc.ca.

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CIHI Report Sheds Light on Physician Shortage Perception

Over the past decade, perceptions about the supply of physicians in Canada have taken a 180-degree turn. Many Canadians now report difficulties finding family doctors, and stories of waiting lists for specialist services are common. Yet, just 10 years ago, medical school positions were cut, physicians were encouraged to retire and doctors from other countries were discouraged from coming to Canada.

How did this perception change so quickly? CIHI's newest report, entitled "*From Perceived Surplus to Perceived Shortage: What Happened to Canada's Physician Workforce in the 1990s?*", analyzes what happened to Canada's supply of doctors over the past decade.

This report was commissioned by CIHI to assist in the study of emerging physician supply issues and was authored by Dr. Ben Chan.

According to the report's calculations, physician supply peaked in 1993 and has since dropped 5%, to the same level as in 1987. Dr. Chan's estimates account for the fact that the population is aging, the elderly use health care services more intensely and a growing number of physicians are females who, on average, work fewer hours than their male colleagues.

To identify the causes of this drop, the study examined the inflows to and outflows from Canada's physician workforce before and after 1993. The results show that:

- The biggest factor behind Canada's drop in physician supply was an increase in the amount of time doctors spend in postgraduate training. This accounted for 25% of the estimated decline in the physician supply;
- 22% of the decline was due to fewer foreign doctors entering Canada;
- 17% was due to more physicians retiring; and
- Only 11% was due to medical school enrolment cuts.

Visit CIHI's Web site (www.cihi.ca) to order a copy of the report (available for a fee in PDF format or print version).

Advantages of Web-Based Hospital Comparative Reports (eCHAP)

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eCHAP provides a means of assessing hospital activity using nationally uniform variables enabling user-defined comparisons and groupings of hospitals by type, size or location. Hospitals using eCHAP have the ability to select from several options to quickly and easily create customized paper or electronic reports. eCHAP reports include information on volumes, length of stay, demographics, deaths, transfers, alternative levels of care, admission types, special care unit utilization and resource intensity. eCHAP reports are quarterly cumulative releases.

A major advantage of eCHAP is that hospitals can access comparative information from all participating hospitals rather than only those hospitals within their own peer group. Hospitals can also access data from two fiscal years to facilitate their analysis. On-line report decoders permit easy access to information about the reports. Custom electronic reports can be imported into other analytical software packages for further analysis or the creation of graphs and presentations.

To date, eCHAP uses include special studies, utilization management, decision support, peer comparisons and clinical management.

Seventy-five per cent of eligible acute care hospitals in Canada have registered for CIHI's eCHAP product.

Protecting the confidentiality and security of CIHI's data holdings is a major priority at CIHI. Working within the parameters of corporate privacy, confidentiality and security policies, CIHI developed the eCHAP application and appropriate legal agreements to ensure that confidential data were adequately protected.

A demonstration of eCHAP is available at www.cihi.ca. FY 2002 CHAP reports will not be available in paper from CIHI.

CIHI directions ICIS

CIHI directions ICIS is published three times a year (January, June, October) 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 a common 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.

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