



Health Human Resources Database Privacy
Impact Assessment—May 2012



Canadian Institute
for Health Information

Institut canadien
d'information sur la santé



Our Vision

Better data. Better decisions.
Healthier Canadians.

Our Mandate

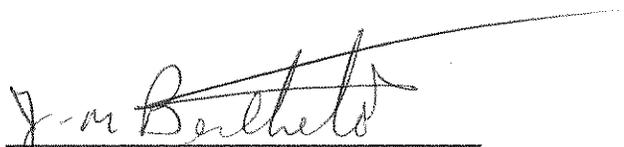
To lead the development and maintenance of comprehensive and integrated health information that enables sound policy and effective health system management that improve health and health care.

Our Values

Respect, Integrity, Collaboration,
Excellence, Innovation

Health Human Resources Database Privacy Impact Assessment

Approved by:



Jean-Marie Berthelot
Vice-President, Programs



Anne-Mari Phillips
Chief Privacy Officer & General Counsel

Ottawa – May 2012

Table of Contents

10 Quick Facts About the Health Human Resources Database	iii
1 Introduction	1
1.1 The Canadian Institute for Health Information	1
2 Overview of the HHRDB	1
2.1 General Goals and Objectives of the HHRDB	2
2.2 Scope of the HHRDB	2
3 Privacy Analysis	4
3.1 Authorities and Agreements for the Collection, Use and Disclosure of Data	4
3.2 Accountability for Health Workforce Personal Information	5
3.3 Identifying Purposes for the HHRDB	5
3.4 Consent for the Collection, Use or Disclosure of Health Workforce Personal Information	6
3.5 Limiting Collection of Health Workforce Personal Information	6
3.6 Limiting Use, Disclosure and Retention of Health Workforce Personal Information	7
3.7 Accuracy of Health Workforce Personal Information	9
3.8 Safeguards for Health Workforce Personal Information	10
3.9 Openness About the Management of Health Workforce Personal Information	11
3.10 Individual Access to, and Amendment of, Health Workforce Personal Information	12
3.11 Complaints About CIHI's Handling of Health Workforce Personal Information	12
4 Conclusion	12
Appendix A—Data Provider Organizations	13
Appendix B—Data Elements, Values and Rationale	17
Appendix C—Information Flow in the HHRDB	19

10 Quick Facts About the Health Human Resources Database

1. Between 2004 and 2009, CIHI undertook the Health Human Resources Databases Development Project to develop separate, national, supply-based databases on five groups of regulated health professionals. The results of the project were the Occupational Therapist Database, the Pharmacist Database, the Physiotherapist Database, the Medical Radiation Technologist Database and the Medical Laboratory Technologist Database.
2. Collectively, these databases are referred to as the Health Human Resources Database (HHRDB). They are maintained at CIHI, and each has an annual reporting mechanism in place.
3. These databases were developed to provide standardized, comparative data and to report on supply, demographic, geographic, education and employment information for these five professional groups in Canada.
4. The goal of the HHRDB is to provide quality and timely workforce information on the supply and distribution of the five groups of regulated health professionals.
5. The objectives of the HHRDB are to
 - Facilitate data collection, processing and quality assurance;
 - Maintain demographic, geographic, education and employment data with comparable time series and report the information in a timely and accurate manner;
 - Support HHR-related longitudinal, retrospective and concurrent analyses and research projects; and
 - Enable more informed decision-making and policy formulation by governments, researchers, advocacy groups and other stakeholders that respond to issues related to health care services and delivery.
6. Regulatory authorities, governments and professional associations/societies are the primary data collectors for the five professional groups in the HHRDB. They collect registrant-identifiable personal information from individuals for membership purposes, including the regulation of the professions in their jurisdictions.
7. The scope of the record-level data submitted annually by the above-identified data collectors to the HHRDB includes supply, demographic, geographic, education and employment information. The data elements are defined by an established national minimum data set for the registered health professionals.
8. The HHRDB does not collect health care professionals' names, work or home addresses (number, street name and city) or contact information (for example, telephone number).

9. The HHRDB provides national, standardized, supply-based data and allows for timely, objective and evidence-based analyses and cross-country comparisons to support key stakeholders in decision-making and policy formulation relevant to HHR planning and management.
10. Typical examples of studies illustrating how HHRDB data has been used include labour market studies and examinations of the education and employment characteristics of the workforces within a broad overview of HHR planning.

1 Introduction

1.1 The Canadian Institute for Health Information

The Canadian Institute for Health Information (CIHI) collects and analyzes information on health and health care in Canada. Its mandate is to provide timely, accurate and comparable information to inform health policies, support the effective delivery of health services and raise awareness among Canadians of the factors that contribute to good health. CIHI obtains data directly from hospitals, regional health authorities, medical practitioners, regulatory bodies, national associations/societies and governments, including personal health information about patients and registration and practice information about health professionals.

The purpose of this privacy impact assessment is to examine the privacy, confidentiality and security risks associated with five health human resources (HHR) databases. It includes a review of the 10 privacy principles set out in the Canadian Standards Association's *Model Code for the Protection of Personal Information* as they apply to the HHR databases.

This privacy impact assessment updates those completed in 2006 and 2007.

2 Overview of the HHRDB

Between 2004 and 2009, CIHI undertook the Health Human Resources Databases Development Project to develop separate, national, supply-based databases on five groups of regulated health professionals. The results of the project were the Occupational Therapist Database (OTDB), the Pharmacist Database (PDB), the Physiotherapist Database (PTDB), the Medical Radiation Technologist Database (MRTDB) and the Medical Laboratory Technologist Database (MLTDB). These databases were developed to address existing data gaps; to provide standardized, comparative data; and to report on supply, demographic, geographic, education and employment information for these five professional groups in Canada.

Collectively, these databases are referred to as the Health Human Resources Database (HHRDB). They are maintained at CIHI, and each database has an annual reporting mechanism in place.

The HHRDB contains coded data related to professional information about the specified regulated health professionals, along with limited demographic and geographic personal information.

Provincial/territorial regulatory authorities, governments and provincial/national professional associations/societies are the primary data collectors for the five professional groups in the HHRDB (see Appendix A). CIHI is a secondary user of HHRDB data, specifically for the planning and management of the health system, including statistical analysis and reporting.

2.1 General Goals and Objectives of the HHRDB

The specific goal of the HHRDB is to provide quality and timely workforce information on the supply and distribution of the five groups of regulated health professionals. This information enables informed decision-making and policy formulation by governments, health professionals, researchers and advocacy groups that are concerned with health services and health care delivery.

The objectives of the HHRDB are to

- Facilitate data collection, processing and quality assurance;
- Maintain demographic, geographic, education and employment data with comparable time series and report the information in a timely and accurate manner;
- Support HHR-related longitudinal, retrospective and concurrent analyses and research projects; and
- Enable more informed decision-making and policy formulation by governments, researchers, advocacy groups and other stakeholders that respond to issues related to health care services and delivery.

2.2 Scope of the HHRDB

Regulatory authorities, governments and professional associations/societies are the primary data collectors for the five professional groups in the HHRDB. They collect registrant-identifiable personal information from individuals for membership purposes, including the regulation of the professions in their jurisdictions.

The scope of the record-level data submitted annually by the above-identified data collectors to the HHRDB includes supply, demographic, geographic, education and employment information. The data elements are defined by an established national minimum data set for the registered health professional groups. However, the HHRDB does not collect individual health care professionals' names, work or home addresses (number, street name and city) or contact information (for example, telephone number).

Two of the five databases in the HHRDB (OTDB and PDB) capture information on only those professionals who meet CIHI's criteria for active registrants (that is, those professionals who are registered with a data provider and eligible to practise). The three remaining databases (PTDB, MLTDB and MRTDB) capture information on those professionals who meet CIHI's criteria for both active and inactive (that is, those professionals who are registered with a data provider but ineligible to practise) registrants.

The following are examples of the HHRDB data collected (see Appendix B for links to the data dictionaries that provide a complete list of data elements, values and rationale for collection):

Demographic Data

- Registrant's provincial unique identification/registration number
- Gender
- Year of birth

Geographic Data

- Registrant's country or province/territory of residence at the time of registration or renewal
- Country, province/territory or university/institute registrant graduated in/from
- Employer's country or province/territory or postal code of registrant's employment location

Education Data

- University of graduation
- Year of graduation
- Level of education

Employment

- Category/status
 - Employed, unemployed
 - Permanent, temporary, self-employed
 - Full time, part time

The following is a list and description of selected data elements from the HHRDB that could be considered sensitive and the rationale for their collection:

Provincial Unique Identification/Registration Number

This number, assigned by each data provider, uniquely identifies a health professional within the information system maintained by each data provider. With the collection of this data element, it is possible to follow changes specific to a unique health professional over time and to conduct longitudinal, retrospective and concurrent analyses and studies of supply and distribution trends. Data providers may choose to submit pseudonymized numbersⁱ to CIHI instead of the registration number.

Gender

This data element is required to determine trends in employment, recruitment and career patterns for HHR planning (for example, proportion of the workforce that is female).

i. Pseudonymized means that a registration number has been removed and a manufactured number assigned in its place. The manufactured number is assigned in a consistent manner that allows data users to determine that several records (for example, records appearing in different data years) relate to the same individual.

Year of Birth

This data element is required to determine trends and to establish patterns for HHR planning (for example, to calculate the average age of the workforce). Only the year of birth is collected. Day and month of birth are not collected to further protect the privacy of the registrants and to reduce the possibility of re-identification. Collecting year of birth provides maximum flexibility in responding to information needs associated with the age-related characteristics of the workforce (for example, age-related retirement projections).

Postal Code of Employment

CIHI collects the six-character postal code of employment to assign and aggregate health professionals to geographical areas that are relevant for health planning and research. CIHI uses a health professional's postal code of employment only to assign that individual to a particular geographic area for subsequent aggregation (grouping). The six-character postal code of employment is required to support analyses, such as on sub-provincial/-territorial geographical mobility and/or distribution of the health workforce, or to examine regional variations in other common variables, such as educational attainment, type of practice and employment status. It enables CIHI to aggregate individual health professionals into larger groups (such as health region) or into rural and urban areas for analysis and reporting.

3 Privacy Analysis

3.1 Authorities and Agreements for the Collection, Use and Disclosure of Data

Federal, provincial and territorial governments specifically created CIHI to be a central repository of health data, to streamline the health information system in Canada and to provide timely information for the purposes of analysis, management and planning of the health care system, as well as to increase the public's awareness of factors that affect health.

CIHI collects data for the HHRDB under terms that are mutually agreed-upon by CIHI and each data provider (regulatory authority, government and professional association/society), as set out in each data collector's letter of agreement with CIHI. Individual data providers have the option of including companion agreements with CIHI that outline further requirements in compliance with governing legislation. The data is collected, used and disclosed in accordance with these terms and with CIHI's *Health Workforce Privacy Policy, 2011*.

At this time, there are no plans to expand the HHRDB. CIHI holds regular meetings with stakeholders to review the data elements to ensure that the database accurately reflects the changing environment of Canada's health care system and the needs of managing human resources for these five professional groups. The data elements and values may be amended by mutual agreement between CIHI and the data providers. Any such amendments shall be in accordance with applicable privacy legislation and will be reflected in updates to this privacy impact assessment on CIHI's website.

3.2 Accountability for Health Workforce Personal Information

CIHI's president and chief executive officer is accountable for ensuring compliance with CIHI's *Health Workforce Privacy Policy, 2011*. CIHI has a chief privacy officer and general counsel, a corporate Privacy, Confidentiality and Security team, a Privacy and Data Protection Committee of its Board of Directors and an external chief privacy advisor.

Participants in the HHRDB are subject to the requirements of data protection laws in their respective jurisdictions and the independent oversight of privacy commissioners or their equivalents.

The following table identifies key internal CIHI positions and groups with responsibilities for the HHRDB in terms of privacy and security risk management:

Position/Group	Roles/Responsibilities
Vice President, Programs	Responsible for the overall operations and strategic direction of the HHRDB.
Director, Pharmaceuticals and Health Workforce Information Services	Fully accountable for the HHRDB. Responsible for strategic and operational decisions.
Manager, Health Human Resources B	Responsible for ongoing management, development and deployment of the HHRDB. Makes operational decisions and manages consultation with HHRDB stakeholders as appropriate.
Program Lead, Health Human Resources B	Responsible for operations, research and production of the analytical outputs of the HHRDB. Also responsible for client–stakeholder relationships with respect to gathering information about any changing needs.
Senior Analyst and Analysts, Health Human Resources B	The first point of contact for the data providers. Responsible for conducting activities to fulfill the strategic and operational goals of the HHRDB.
Vice President and Chief Technology Officer	Responsible for the strategic direction and overall operations/implementation of CIHI's technological and security solutions.
Chief Privacy Officer	Responsible for the strategic direction and the overall implementation of CIHI's privacy program.

3.3 Identifying Purposes for the HHRDB

Before 2004, policy reports and research papers consistently identified that there was very little national, standardized data on health professionals in Canada, except for physicians and regulated nurses. Based on consultation with federal/provincial/territorial ministries of health and other key stakeholders, the five professional groups in the HHRDB were identified as the focus of such data development.

The HHRDB was created in response to the identified information needs. The HHRDB provides national, standardized, supply-based data and allows for timely, objective and evidence-based analyses and cross-country comparisons to support key stakeholders on decision-making and policy formulation relevant to HHR planning and management. Typical examples of studies illustrating how HHRDB data has been used include labour market studies and examinations of the education and employment characteristics of the workforce within a broad overview of HHR planning.

3.4 Consent for the Collection, Use or Disclosure of Health Workforce Personal Information

Data providers are responsible for meeting the statutory requirements in their respective jurisdictions, where applicable, at the time the data is initially collected. CIHI is a secondary user of health workforce personal information, specifically for the planning and management of the health system, including statistical analysis and reporting. HHRDB data is disclosed to CIHI with consent if this is specifically required by legislation.

3.5 Limiting Collection of Health Workforce Personal Information

CIHI is committed to the principle of data minimization. As per sections 1 and 2 of CIHI's *Health Workforce Privacy Policy, 2011*, CIHI collects from data providers only that data which is reasonably required for health system uses, including statistical analysis and reporting, in support of the management, evaluation or monitoring of the allocation of resources to, or planning for, the health care system in Canada, including support for the improvement of the overall health of Canadians. CIHI limits the collection of health workforce personal information to that which is necessary for the purposes and goals of the HHRDB.

The focus of HHRDB data collection—demographic, geographic, education and employment information—is a subset of the priority information needs for HHR management that were identified and validated through a national consultation process completed in 2005.ⁱⁱ Based on this foundation, the data elements included in the HHRDB minimum data set were further reduced and refined through extensive consultation with national and provincial representatives from the regulatory authorities and professional associations/societies representing the five professional groups in the HHRDB.

A review and update of the variables collected is completed annually with data providers to ensure that the purposes of the HHRDB are met.

Information on the data elements and values being collected in 2011 and for the duration of the letters of agreement, including the rationale for collecting them, is available by profession (see Appendix B).

Individual health professionals' names, home or work addresses (number, street name and city) and contact information (for example, telephone number) are not collected in the HHRDB because they are not required for the purposes of the database.

ii. For more information, see *Guidance Document for the Development of Data Sets to Support Health Human Resources Management in Canada* at www.cihi.ca.

3.6 Limiting Use, Disclosure and Retention of Health Workforce Personal Information

CIHI's use, disclosure and retention of HHRDB information is governed by CIHI's *Health Workforce Privacy Policy, 2011*.

Limiting Use

CIHI limits the use of data in the HHRDB to authorized purposes, as described in Section 3.3 of the *Health Workforce Privacy Policy, 2011*. This includes longitudinal, retrospective and concurrent analyses and studies of supply and distribution trends. Staff from the HHRDB program area are permitted to access and use data on a need-to-know basis only, including for data processing and quality management, the production of statistics and data files, and analysis purposes. All authorized users are made aware of their obligations and responsibilities for privacy and confidentiality. All CIHI staff are required to sign a confidentiality agreement at the commencement of employment, and they are subsequently required to renew their commitment to privacy yearly.

Data Linkage

Sections 14 to 31 of CIHI's *Health Workforce Privacy Policy, 2011* govern linkage of records of health workforce personal information. Pursuant to this policy, CIHI permits the linkage of health workforce personal information under certain circumstances. Data linkage within a single data holding for CIHI's own purposes is generally permitted. Data linkage across data holdings for CIHI's own purposes and all third-party requests for data linkage are subject to an internal review and approval process. The linked data remains subject to the use and disclosure provisions in the *Health Workforce Privacy Policy, 2011*.

Criteria for approving data linkages are set out in Section 24 of CIHI's *Health Workforce Privacy Policy, 2011*, as follows:

- (1) The individuals whose health workforce personal information is used for data linkage have consented to the data linkage; or
- (2) All of the following criteria are met:
 - (a) The purpose of the data linkage is consistent with CIHI's mandate;
 - (b) The public benefits of the linkage significantly offset any risks to the privacy of individuals;
 - (c) The results of the data linkage will not be used for any purpose that would be detrimental to the individuals that the health workforce personal information concerns;
 - (d) The data linkage is for a time-limited specific project, and the linked data will be subsequently destroyed in a manner consistent with sections 28 and 29; or
 - (e) The data linkage is for purposes of an approved, ongoing CIHI program of work where the linked data will be retained for as long as necessary to meet the identified purposes and, when no longer required, will be destroyed in a manner consistent with sections 28 and 29; and
 - (f) The data linkage has demonstrable savings over other alternatives or is the only practical alternative.

Section 28 of CIHI's *Health Workforce Privacy Policy, 2011* sets out the requirement that CIHI destroy health workforce personal information and de-identified data in a secure manner, using destruction methodologies appropriate to the format, media or device, such that reconstruction is not reasonably foreseeable.

Section 29 of CIHI's *Health Workforce Privacy Policy, 2011* further requires that, for linked data, secure destruction will occur within one year after publication of the resulting analysis or three years after the linkage, whichever is sooner, in a manner consistent with CIHI's Information Destruction Standard. For linked data resulting from an ongoing CIHI program of work, secure destruction will occur when the linked data is no longer required to meet the identified purposes, in a manner consistent with CIHI's Information Destruction Standard. These requirements apply to both data linkages for CIHI's own purposes and third-party data requests.

Return of Own Data

Section 34 of CIHI's *Health Workforce Privacy Policy, 2011* establishes that the return of data to the original data provider is considered a use, not a disclosure. This may include return of health workforce personal information. In the case of the HHRDB, the regulatory authorities and professional associations/societies are given access to their own data.

Limiting Disclosure

Public Release of Data From the HHRDB

As part of its mandate, CIHI publishes only aggregate data in a manner designed to minimize any risk of identification and residual disclosure of health workforce personal information. For example, aggregate statistics and analyses are made available on CIHI's website. This generally requires a minimum of five observations per cell. Data releases and reports are subject to CIHI's standard practices for avoiding residual disclosure. Reports are reviewed for such risks and, where necessary, data is aggregated to a higher level.

Third-Party Data Requests

Customized, record-level, de-identified data and aggregate information from the HHRDB are periodically requested by a variety of users, including federal and provincial/territorial governments, educational institutions and the media. As set out in sections 45 to 47 of CIHI's *Health Workforce Privacy Policy, 2011*, disclosures are made at the highest degree of anonymity possible while still meeting the research and/or analytical purposes of the requester. This means that, whenever possible, data is aggregated. If aggregate data is not sufficiently detailed for the intended purpose, data that has been de-identified may be disclosed to the recipient on a case-by-case basis. Only those data elements necessary to meet the intended purpose may be disclosed.

CIHI's third-party data request program contains and ensures tight privacy and security controls within the recipient organization. Third parties requesting record-level data are required to submit a written request using CIHI's third-party data request form and to sign CIHI's information security form and non-disclosure/confidentiality agreement. By signing these documents, receiving organizations are obligated to

- Use the CIHI data for only the purpose specified;
- Keep de-identified record-level data strictly confidential and not disclose such data to anyone outside the organization;
- Use strong encryption technology that meets or exceeds CIHI's standards when mobile computing devices are used;
- Not publish cell sizes with fewer than five observations;
- Securely destroy CIHI data at the end of the retention period; and
- Acknowledge CIHI's right to audit.

In 2009, CIHI adopted a complete lifecycle approach to data management. As part of that lifecycle, Privacy and Legal Services (PLS) developed and is responsible for the ongoing compliance monitoring process whereby all data sets that are disclosed to third-party data recipients are tracked and monitored for secure destruction at the end of their lifecycle. Prior to disclosing data, third-party recipients sign a non-disclosure/confidentiality agreement and agree to comply with the conditions and restrictions imposed by CIHI relating to the collection, purpose, use, security, disclosure and secure destruction of data.

As of January 2011, in addition to the compliance monitoring process, which leverages data captured to monitor compliance with data destruction requirements, PLS contacts third-party data recipients on an annual basis to certify that they continue to comply with their obligations as set out in any agreement, third-party data request form and non-disclosure/confidentiality agreement signed with CIHI.

Limiting Retention

The HHRDB forms part of CIHI's information holdings; consistent with CIHI's mandate and core functions, it retains such information for as long as necessary to meet the identified purposes.

3.7 Accuracy of Health Workforce Personal Information

To ensure data quality, data received by CIHI for inclusion in the HHRDB undergoes two stages of processing before being included in the national database.

In the first stage, the staff of the HHRDB conduct edit, validation and logic checks on the data transmitted from the data providers to ensure that the files are in the proper format and to identify missing and/or invalid data and inconsistencies in data transmissions. To support the continuous improvement of data quality or enhancements to the data processing cycle, feedback reports are sent to data providers, who are expected to correct source data if needed and resubmit the entire file. In certain instances when resubmission is not possible, CIHI may correct the data on behalf of the data provider when a data provider has provided the corrections to CIHI and requested that CIHI implement those changes.

The second stage of review by CIHI identifies duplicate records. To accurately count the number of health professionals working in Canada, procedures to determine secondary registrations are used to identify health professionals who are registered in two or more jurisdictions. Although all data received from data providers is kept in the HHRDB, duplicate records are typically excluded from reports on the national workforce for a professional group.

Both stages of processing are desirable practices from a data quality and data protection perspective, because they help to ensure the accuracy of the information in the database. Upon completing each stage of processing, CIHI requires each data provider to provide signed authorization verifying the quality of the data submitted to CIHI and to be reported by CIHI.

Maintaining and enhancing the quality of incoming data is essential to CIHI's mandate to produce high-quality health information. CIHI's corporate data quality program ensures the continued regular improvement of the quality of CIHI's databases and registries to meet changing and expanding user requirements and expectations. A cornerstone of CIHI's data quality program is the Data Quality Framework. CIHI developed this tool to provide a common and objective approach to assessing and documenting the data quality of its various data holdings along five general dimensions of quality: accuracy, comparability, timeliness, usability and relevance. CIHI's Data Quality Framework is applied to the HHRDB.

Further information on CIHI's data quality program and Data Quality Framework can be found at www.cihi.ca.

3.8 Safeguards for Health Workforce Personal Information

CIHI Privacy and Security Framework

CIHI has developed a [Privacy and Security Framework](#) to provide a comprehensive approach to privacy and security management. Based on best practices from across the public, private and health sectors, the framework is designed to coordinate CIHI's privacy and security policies and provide an integrated view of the organization's information management practices. Key aspects of CIHI's system security with respect to the HHRDB are highlighted below.

System Security

CIHI is committed to safeguarding its IT ecosystem, to securing its data holdings and to protecting information with administrative, physical and technical security safeguards appropriate to the sensitivity of the information. CIHI has established physical, technical and administrative security practices to ensure the confidentiality and security of all of its data holdings. Moreover, CIHI's employees are aware of the importance of maintaining the confidentiality of health workforce personal information through a mandatory privacy and security training program and through ongoing communications about CIHI's privacy and security policies and procedures.

Data Submission and Processing Safeguards

Data is received directly from submitting data providers. Please see Appendix C for a visual representation of the data flow.

CIHI has created preferred methods of collection that set out standard practices for the secure submission of data. All HHRDB data is submitted to CIHI electronically in keeping with the Health Data Collection Standard.

Access Controls

CIHI's offices have controlled physical access: pass cards and pass codes are required to enter working areas. Network and computer security measures in place include standards for usernames and the requirement for passwords to be changed on a regular basis.

The HHRDB data processing applications contain access restrictions to limit access to and use of the data to authorized staff. CIHI has implemented a data access process whereby employees who require access to processed data must first obtain approval from their manager and the HHRDB manager. Access is granted only for the duration for which it is required, and data access is audited on a yearly basis.

As a general rule, work performed by CIHI's employees is to be done on CIHI's premises and/or over its secure networks.

Audits

Audits are an important component of CIHI's overall information security program and are intended to ensure that best practices are being followed and to assess compliance with all information security policies, procedures and practices implemented by CIHI. Audits are used to assess, among other things, technical compliance of information processing systems with best practices and published architectural and security standards; CIHI's ability to safeguard its information and information processing systems against threats and vulnerabilities; and the overall security posture of CIHI's technical infrastructure, including networks, servers, firewalls, software and applications.

An important component of CIHI's audit program is regular third-party vulnerability assessments and penetration tests of its infrastructure and selected applications. All recommendations resulting from third-party audits are tracked in the corporate risk register, and action is taken as needed.

3.9 Openness About the Management of Health Workforce Personal Information

CIHI makes information available about its privacy policies, data practices and programs relating to the management of health workforce personal information. Specifically, CIHI's *Privacy and Security Framework, 2010* and *Health Workforce Privacy Policy, 2011* are available to the public on its corporate website (www.cihi.ca).

3.10 Individual Access to, and Amendment of, Health Workforce Personal Information

Regulatory authorities, governments and professional associations/societies provide record-level data to CIHI. The data includes jurisdictional identification numbers (also known as registration numbers). However, CIHI does not collect names and street addresses; as well, when pseudonymized numbers are submitted by the data provider, CIHI does not have access to the key that associates/links the number with a person. The HHRDB contains very limited health workforce personal information and, as such, individuals cannot reliably be identified.

Requests from individuals seeking access to their personal information will be processed in accordance with sections 60 to 63 of CIHI's *Health Workforce Privacy Policy, 2011*. It should be noted that over the six to seven years since the original privacy impact assessments were completed, there have been no cases where an individual has approached CIHI to request access to, or amendment of, his or her personal information in the HHRDB.

3.11 Complaints About CIHI's Handling of Health Workforce Personal Information

As set out in sections 64 and 65 of CIHI's *Health Workforce Privacy Policy, 2011*, complaints about CIHI's handling of health workforce personal information are investigated by the chief privacy officer. The chief privacy officer may direct an inquiry or complaint to the privacy commissioner of the jurisdiction of the person making the inquiry or complaint.

4 Conclusion

CIHI's assessment of the HHRDB did not identify any privacy risks.

Appendix A—Data Provider Organizations

OTDB Data Providers

Data Provider Organization	Regulatory Body or Professional Association	Corresponding Province/Territory
Newfoundland and Labrador Occupational Therapy Board	Regulatory Body	Newfoundland and Labrador
Prince Edward Island Occupational Therapists Registration Board	Regulatory Body	Prince Edward Island
College of Occupational Therapists of Nova Scotia	Regulatory Body	Nova Scotia
New Brunswick Association of Occupational Therapists	Regulatory Body	New Brunswick
College of Occupational Therapists of Ontario	Regulatory Body	Ontario
College of Occupational Therapists of Manitoba	Regulatory Body	Manitoba
Saskatchewan Society of Occupational Therapists	Regulatory Body	Saskatchewan
Alberta College of Occupational Therapists	Regulatory Body	Alberta
College of Occupational Therapists of British Columbia	Regulatory Body	British Columbia
Canadian Association of Occupational Therapists	Professional Society	Yukon, Northwest Territories, Nunavut

PDB Data Providers

Data Provider Organization	Regulatory Body or Professional Association	Corresponding Province/Territory
Newfoundland and Labrador Pharmacy Board	Regulatory Body	Newfoundland and Labrador
Prince Edward Island Pharmacy Board	Regulatory Body	Prince Edward Island
Nova Scotia College of Pharmacists	Regulatory Body	Nova Scotia
New Brunswick Pharmaceutical Society	Regulatory Body	New Brunswick
Ontario College of Pharmacists	Regulatory Body	Ontario
Manitoba Pharmaceutical Association	Regulatory Body	Manitoba
Saskatchewan College of Pharmacists	Regulatory Body	Saskatchewan
Alberta College of Pharmacists	Regulatory Body	Alberta
College of Pharmacists of British Columbia	Regulatory Body	British Columbia
Yukon Government	Regulatory Body	Yukon
Government of the Northwest Territories	Regulatory Body	Northwest Territories

PTDB Data Providers

Data Provider Organization	Regulatory Body or Professional Association	Corresponding Province/Territory
Newfoundland and Labrador College of Physiotherapists	Regulatory Body	Newfoundland and Labrador
Prince Edward Island College of Physiotherapists	Regulatory Body	Prince Edward Island
Nova Scotia College of Physiotherapists	Regulatory Body	Nova Scotia
College of Physiotherapists of New Brunswick	Regulatory Body	New Brunswick
Ordre professionnel de la physiothérapie du Québec	Regulatory Body	Quebec
College of Physiotherapists of Ontario	Regulatory Body	Ontario
College of Physiotherapists of Manitoba	Regulatory Body	Manitoba
Saskatchewan College of Physical Therapists	Regulatory Body	Saskatchewan
College of Physical Therapists of Alberta	Regulatory Body	Alberta
College of Physical Therapists of British Columbia	Regulatory Body	British Columbia
Yukon Government	Regulatory Body	Yukon

MLTDB Data Providers

Data Provider Organization	Regulatory Body or Professional Association	Corresponding Province/Territory
Nova Scotia College of Medical Laboratory Technologists	Regulatory Body	Nova Scotia
New Brunswick Society of Medical Laboratory Technologists	Regulatory Body	New Brunswick
Ordre professionnel des technologistes médicaux du Québec	Regulatory Body	Quebec
College of Medical Laboratory Technologists of Ontario	Regulatory Body	Ontario
College of Medical Laboratory Technologists of Manitoba	Regulatory Body	Manitoba
Saskatchewan Society of Medical Laboratory Technologists	Regulatory Body	Saskatchewan
Alberta College of Medical Laboratory Technologists	Regulatory Body	Alberta
Canadian Society for Medical Laboratory Science	Professional Society	Newfoundland and Labrador, Prince Edward Island, British Columbia, Yukon, Northwest Territories, Nunavut

MRTDB Data Providers

Data Provider Organization	Regulatory Body or Professional Association	Corresponding Province/Territory
Newfoundland and Labrador Association of Medical Radiation Technologists	Professional Association	Newfoundland and Labrador
Prince Edward Island Association of Medical Radiation Technologists	Professional Association	Prince Edward Island
Nova Scotia Association of Medical Radiation Technologists	Professional Association/ Regulatory Body	Nova Scotia
New Brunswick Association of Medical Radiation Technologists	Professional Association/ Regulatory Body	New Brunswick
Ordre des technologues en radiologie du Québec	Regulatory Body	Quebec
College of Medical Radiation Technologists of Ontario	Regulatory Body	Ontario
Manitoba Association of Medical Radiation Technologists	Professional Association	Manitoba
Saskatchewan Association of Medical Radiation Technologists	Professional Association/ Regulatory Body	Saskatchewan
Alberta College of Medical Diagnostic and Therapeutic Technologists	Regulatory Body	Alberta
Canadian Association of Medical Radiation Technologists	Professional Association	British Columbia (aggregate data), Yukon, Northwest Territories, Nunavut

Note

Some data providers that are regulatory bodies may also have a role as professional organizations.

Appendix B—Data Elements, Values and Rationale

Please see each database's data dictionary for a complete list of data elements, values and rationale.

[*OTDB Data Dictionary*](#)

[*PDB Data Dictionary*](#)

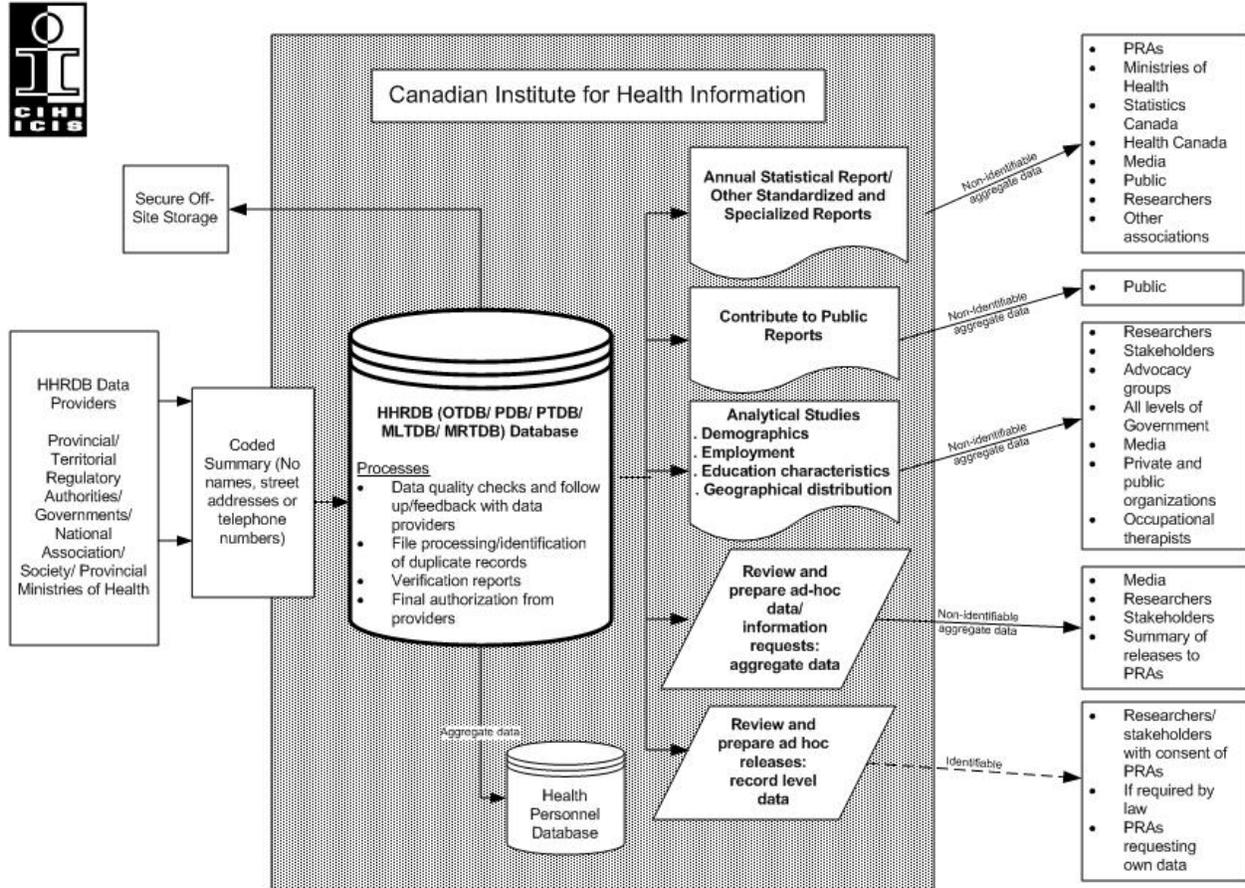
[*PTDB Data Dictionary*](#)

[*MLTDB Reference Guide*](#)

[*MRTDB Data Dictionary*](#)

Appendix C—Information Flow in the HHRDB

The flowchart below represents how information flows to and from the HHRDB.



All rights reserved.

The contents of this publication may be reproduced unaltered, in whole or in part and by any means, solely for non-commercial purposes, provided that the Canadian Institute for Health Information is properly and fully acknowledged as the copyright owner. Any reproduction or use of this publication or its contents for any commercial purpose requires the prior written authorization of the Canadian Institute for Health Information. Reproduction or use that suggests endorsement by, or affiliation with, the Canadian Institute for Health Information is prohibited.

For permission or information, please contact CIHI:

Canadian Institute for Health Information
495 Richmond Road, Suite 600
Ottawa, Ontario K2A 4H6

Phone: 613-241-7860

Fax: 613-241-8120

www.cihi.ca

copyright@cihi.ca

© 2012 Canadian Institute for Health Information

Cette publication est aussi disponible en français sous le titre [French Title](#).

Talk to Us

CIHI Ottawa

495 Richmond Road, Suite 600
Ottawa, Ontario K2A 4H6
Phone: 613-241-7860

CIHI Toronto

4110 Yonge Street, Suite 300
Toronto, Ontario M2P 2B7
Phone: 416-481-2002

CIHI Victoria

880 Douglas Street, Suite 600
Victoria, British Columbia V8W 2B7
Phone: 250-220-4100

CIHI Montréal

1010 Sherbrooke Street West, Suite 300
Montréal, Quebec H3A 2R7
Phone: 514-842-2226

CIHI St. John's

140 Water Street, Suite 701
St. John's, Newfoundland and Labrador A1C 6H6
Phone: 709-576-7006