

Privacy Impact Assessment

Health Personnel Database (HPDB)



Canadian Institute
for Health Information

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Health Personnel Database (HPDB)

Privacy Impact Assessment

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Preamble

The Canadian Institute for Health Information (CIHI) is committed to respecting personal privacy, safeguarding the confidentiality of information (including health, personal and professional information) and providing a secure environment for information under its administration. CIHI's Privacy Secretariat facilitates this commitment through the management of a corporate privacy program. Part of this program includes conducting Privacy Impact Assessments (PIAs) on all data holdings to ensure that CIHI's data collection, use and disclosure activities meet the requirements of corporate privacy principles, policies and procedures.¹ CIHI's principles, policies and procedures are based on Schedule 1 of the federal *Personal Information Protection and Electronic Documents Act*.

This document is a report of the results of a PIA undertaken for CIHI's Health Personnel Database (HPDB). **The HPDB does not collect, use or disclose personal information.** Individual record-level data are not collected or maintained in the HPDB. To apply due diligence, the database has been reviewed—as summarized in the sections below.

¹ *Privacy and Confidentiality of Health Information at CIHI: Principles and Policies for the Protection of Personal Health Information and Policies for Institution-Identifiable Information*, third edition, April 2002.

1. Introduction and Overview

The HPDB is a national database that was transferred in 1995 to CIHI from Health Canada's Health Information Division. Originating in the 1970s, the database was initially comprised of aggregate data relating to 31 health professions, but by 2003 that number had been reduced (see Appendix A for the current list of health professions). The HPDB is the only national database containing such a broad variety of Canadian health personnel data and it enables time-series comparisons of health personnel at a national and provincial/territorial level. The type of information maintained for each profession varies, depending on availability of data from over 300 different regulatory authority data providers.

The data collected consists of aggregate counts by province/territory and by year for selected health professions. At minimum, data include the number of members of health professional associations and regulatory authorities by province or territory and year. Where possible, registered, active registered or active registered employed² health personnel data are provided from the appropriate regulatory authority or association.

2. Description

2.1. General Goals and Objectives

CIHI's mandate includes coordinating the provision of accurate and timely data and information required to establish sound health policy, effectively manage the Canadian health system and generate public awareness about factors affecting good health. The HPDB is an example of the Canadian health personnel databases managed by CIHI in accordance with its mandate.

The CIHI publication, *Health Personnel Trends in Canada, 1993–2002* (formerly the Health Personnel in Canada series) is a reference document published every two years that reports the most recent 10-year trends. By providing time-specific information for health personnel groups, this document enables governments, academics, professional health organizations, researchers and managers of health delivery organizations to better understand Canadian health personnel trends.

The objectives of the HPDB are:

- To provide accurate and timely information about health professions in Canada;
- To provide time-series comparisons of aggregate counts of health personnel at a national and provincial or territorial level;

² "Registered" refers to all individuals who are registered with an organization. The count may include individuals in all registration categories (active, inactive, honorary, etc.). "Active registered" refers to all registered or licensed individuals who are legally able to work under the title of the specified health profession. Individuals may or may not be currently employed in the profession. "Active registered employed" refers to personnel registered/licensed with an organization and currently working in the specified health profession.

- To support policy-making and related approved analysis and research projects on the supply and distribution of health personnel in Canada; and
- To facilitate health human resources planning.

A high-level data flow diagram illustrating the collection, use and disclosure of the health personnel data is presented in Appendix B.

2.2 Need for the Health Personnel Database

The data are used for statistical reporting and research purposes, including, but not limited to, pan-Canadian reports, analytical tools, a bi-annual statistical report, ad hoc data or information requests and analytical studies pertaining to the supply and distribution of health personnel in Canada.

2.3 Current and Intended Scope

Current Scope

The HPDB now contains aggregate personnel data from 24 health professions, for people who are either working or eligible to work in Canada. The education data for some health personnel groups are maintained as well. Appendix C lists the data elements of the HPDB.

Intended Scope

The HPDB is not intended to remain static, but is modified as health profession resourcing requirements are identified. For example, in 2003 (the 2002 data collection cycle) a new health profession, medical physicists, was added to the HPDB. In 2004, the database was expanded to include speech-language pathologists, audiologists and nurse practitioners. In addition, the gender data element was added in 2004.

2.4 Conceptual Technical Architecture

The HPDB resides at CIHI's office in Ottawa, Ontario, Canada, in Microsoft Excel and Word formats. The Health Human Resources team at CIHI is responsible for maintaining the technological infrastructure of the HPDB.

3. Data Collection

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

CIHI collects yearly data for the HPDB from approximately 300 providers, including associations, colleges and educational institutions, on a voluntary basis. Where the data submitted to CIHI are de-identified and aggregated, they would not be considered personal information under jurisdictional versions of the *Freedom of Information and Protection of Privacy Acts*.

3.2 Limits on Data Collection

The HPDB receives total counts by health profession on the following five variables; registration status (registered, active registered, active registered employed), gender, graduates, educational institution, and provincial/territorial/national. The data elements collected are set out in Appendix C.

3.3 Data Quality

The HPDB is subject to the CIHI Data Quality Program.

3.4 Sources of Data

The HPDB is populated with aggregate administrative data primarily collected from provincial, territorial and national health associations (where membership is voluntary) and from regulatory and licensing authorities (where membership is a condition of employment) across Canada. Education data are also collected from universities and colleges across Canada offering health care programs for selected health professions.

CIHI also obtains data and information from the following external sources:

- Statistics Canada: population estimates and health personnel data captured in the Census³ and Labour Force Survey⁴;
- Information from the regulatory authorities across Canada, and from the Canadian Information Centre for International Credentials (CICIC);

³ Census data reported for health occupations reflect estimates of those members of the non-institutional population who were 15 years of age and over, with labour market activity in the week (Sunday to Saturday) prior to the Census day, classified as employed and who indicated a place of work inside Canada.

⁴ The Labour Force Survey is a household survey completed monthly by Statistics Canada, and is representative of the Canadian non-institutional population 15 years of age and older. The survey coverage excludes residents of long-term care health facilities (more than six months), members of the Canadian armed forces, persons living on Indian reserves and those in the territories. The survey uses a reference week method to measure labour market activity. CIHI uses this data to compare its data against other sources for comparability purposes and sometimes to supplement them.

- Physician resident counts from the Canadian Post-M.D. Education Registry (CAPER); and
- Physician graduate information from the Association of Canadian Medical Colleges (ACMC).

Data on behalf of physicians (excluding residents), registered nurses, registered psychiatric nurses, and licensed practical nurses are collected from CIHI's own data holdings.

3.5 Personal Information Collected for the HPDB

There is no collection of personal information; only aggregate information is collected (see Section 3.2 and Appendix C).

3.6 Consent Issues in the HPDB

Regulatory authorities are responsible for the collection of raw data and are subject to the laws in their respective jurisdictions regarding the data collection, use, and disclosure of information. The regulatory authorities forward total counts (aggregated data) to CIHI for the purposes of this data holding.

4. Use and Disclosure of Information

4.1 Uses and Disclosure of Information

The HPDB is used to produce pan-Canadian reports, analytical tools, a bi-annual statistical report, ad hoc data and information requests and analytical studies that include demographic and education characteristics (see Appendix D).

The majority of data requested is available in the *Health Personnel Trends in Canada 1993–2002* publication and, as a result, custom data requests are rare. For the 2003–2004 fiscal year, CIHI responded to a total of 14 requests for HPDB data:

	Number	Percentage
Federal and provincial or territorial governments	2	14
Health care sectors	3	21
Educational institutions	4	29
Non-government interests or the private sector	2	14
Other (international, media, . . .)	3	21

5. Privacy Standards: Concerns and Security Measures

5.1 Security Safeguards

The data providers submit aggregate data; remote access to the HPDB file is not permitted. CIHI offices maintain a secure working environment requiring password-protected, controlled-access pass cards to enter the working areas. In addition:

- CIHI staff sign a confidentiality agreement as a condition of employment. CIHI and staff acknowledge that breaches are grounds for dismissal and possible legal action;
- CIHI staff attend mandatory privacy, confidentiality and security training;
- CIHI does not allow confidential records to be removed from its offices;
- Employees are granted access to data on a need-to-know basis; and
- User names/password structures must conform to CIHI's standards and be changed on a regular basis.

5.2 Disclosure Avoidance Practices

Generally, table cells containing fewer than five observations are not reported at CIHI. However, an exception is made for health human resource data, as only five aggregate data elements are submitted to the HPDB and these elements are professional in nature.

6. A Privacy Report Card

6.1 Privacy Report Card

CIHI's data collection, use and disclosure activities are guided by its corporate privacy principles, policies and procedures, which are based on the 10 privacy principles set out in Schedule 1 of the federal *Personal Information Protection and Electronic Documents Act*. Practices for maintaining the HPDB in relation to the 10 privacy principles are summarized below:

1. **Accountability:** CIHI has designated its President and Chief Executive Officer as accountable for compliance with CIHI's *Privacy and Confidentiality of Health Information at CIHI: Principles and Policies for the Protection of Health Information*.
2. **Identifying Purposes:** The purposes of the HPDB are clearly identified in CIHI's *Products and Services Catalogue*, on the CIHI Web site, as well as in this Privacy Impact Assessment.
3. **Consent:** Consent, when and if required, is the responsibility of the respective data providers, as CIHI is the secondary data collector.

4. **Limiting Collection:** Data elements collected are limited to the minimum number possible to meet the purposes of the collection. Five aggregated data elements are collected for the HPDB.
5. **Limiting Use, Disclosure and Retention:** CIHI will retain data as long as is necessary to meet the purposes of the database and of its users to conduct longitudinal, retrospective and concurrent analyses and studies of supply and distribution trends. CIHI will review these retention practices on a regular basis. Data no longer required for the purposes of the HPDB are archived under secure conditions.
6. **Accuracy:** The HPDB is subject to the CIHI Data Quality Program. In addition, CIHI undertakes data checks and edits when data are received and works with participating organizations to correct data errors or omissions.
7. **Safeguards:** Appropriate physical, technological, procedural and other safeguards, including staff confidentiality pledges, staff training and secure transfer of data, provide a secure environment for information held in the HPDB.
8. **Openness:** CIHI provides information on its corporate privacy policies, data practices, programs and uses of information on its corporate Web site. The same information is available in paper format upon request.
9. **Individual Access:** Since the HPDB does not contain any personal information, individuals cannot be identified.
10. **Challenging Compliance:** CIHI's compliance with its privacy policies and procedures may be challenged. If a person does not agree that the Chief Privacy Officer has satisfactorily resolved his or her complaint, the complaint is referred to the Chief Privacy Advisor.

Conclusion

This Privacy Impact Assessment describes CIHI's data collection, use and disclosure of HPDB data. The assessment has highlighted that the HPDB contains only aggregate data and meets the requirements of CIHI's corporate privacy principles, policies and procedures. CIHI will review and amend the HPDB Privacy Impact Assessment should non-aggregated data be collected or other significant changes occur in future.

More information about the Health Personnel Database is available upon request; please direct enquiries to:

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7. Sources of Information for this Privacy Impact Assessment

- Canadian Institute for Health Information, *Health Personnel Trends in Canada, 1993–2002* (Ottawa, 2004)
- Health Personnel Database documentation
- CIHI Data Quality Program

Appendix A
List of Health Professions

Health professions currently contained in the HPDB:

1. Chiropractors
2. Dental hygienists
3. Dentists
4. Dietitians
5. Health records professionals
6. Health service executives
7. Licensed practical nurses
8. Medical laboratory technologists
9. Medical radiation technologists
10. Medical physicists
11. Midwives
12. Occupational therapists
13. Optometrists
14. Pharmacists
15. Physicians
16. Physiotherapists
17. Psychologists
18. Registered nurses
19. Registered psychiatric nurses
20. Respiratory therapists
21. Social workers

Beginning in 2004, the HPDB will also contain raw data and information about:

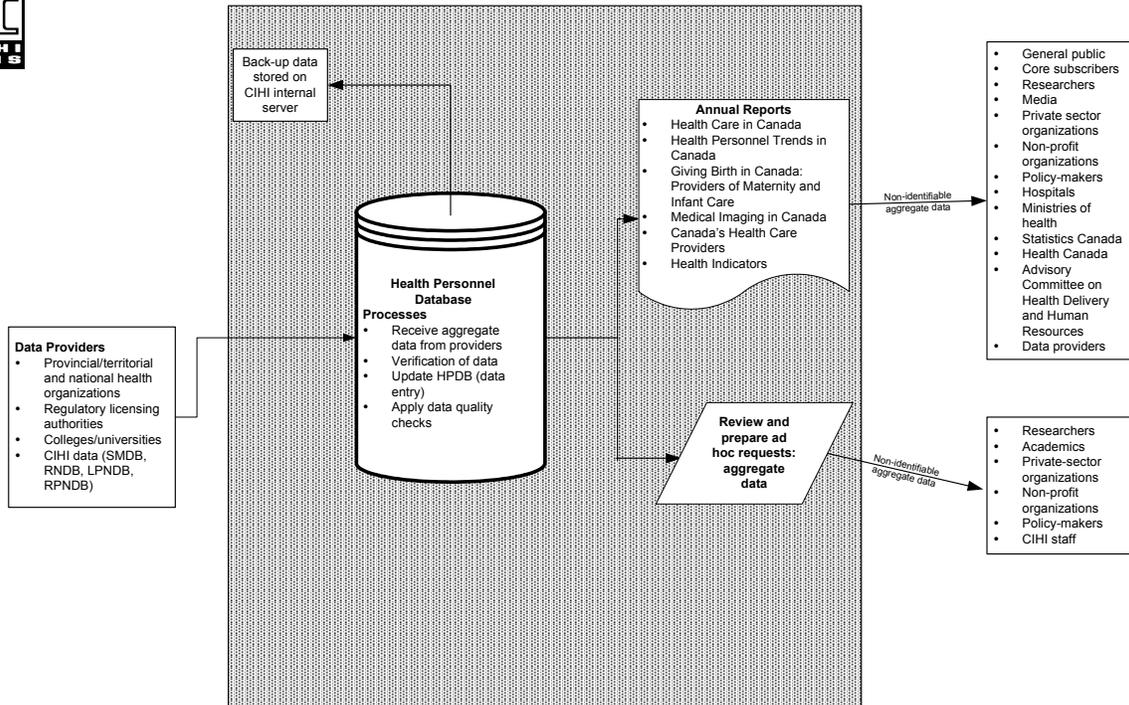
22. Audiologists
23. Nurse practitioners
24. Speech-language pathologists

Appendix B

Data Flow Diagram



Health Personnel Database



September 2004

Appendix C

Data Elements

Data elements collected in 2002–2003 collection cycle

Total counts for a jurisdiction by the following categories of information:

1. Registration status:
 - a. Registered
 - b. Active registered
 - c. Active registered employed
2. Gender
3. Graduates
4. Educational institution
5. Provincial/territorial/national

Appendix D
CIHI-Derived HPDB Products

Listed are examples of the products that are currently available from the HPDB. Updated information about products derived from the HPDB can be found on the CIHI Web site (at www.cihi.ca).

Health Personnel Trends in Canada, 1993–2002

Health Personnel in Canada, 1991–2000

Health Personnel in Canada, 1988–1997

Health Care in Canada, 2004

Giving Birth in Canada: Providers of Maternity and Infant Care, 2004

Medical Imaging in Canada, 2003

Health Indicators, 2003

Canada's Health Care Providers, 2001



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