

Data Quality Documentation, Discharge Abstract Database — Current-Year Information, 2015–2016



Canadian Institute
for Health Information

Institut canadien
d'information sur la santé

Production of this document is made possible by financial contributions from Health Canada and provincial and territorial governments. The views expressed herein do not necessarily represent the views of Health Canada or any provincial or territorial government.

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

© 2016 Canadian Institute for Health Information

Cette publication est aussi disponible en français sous le titre *Document sur la qualité des données, Base de données sur les congés des patients — information sur l'exercice courant, 2015-2016*.

Table of contents

Abbreviations	4
Purpose	5
Coverage	5
Levels of care and submissions, by province/territory	5
Changes to the number of reporting institutions	6
Rate of over-coverage	6
Rate of under-coverage	6
Non-response	6
DAD fields	7
Appendix A: DAD data tables	8
Appendix B: DAD field evolution by fiscal year	13
Contact	18
Bibliography	18

Abbreviations

Alta.	Alberta
B.C.	British Columbia
CAD	Clinical Administrative Databases
CCI	Canadian Classification of Health Interventions
CIHI	Canadian Institute for Health Information
DAD	Discharge Abstract Database
HCN	Health Care Number
HMDB	Hospital Morbidity Database
ICD-10-CA	International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Canada
Man.	Manitoba
NACRS	National Ambulatory Care Reporting System
N.B.	New Brunswick
N.L.	Newfoundland and Labrador
N.S.	Nova Scotia
Nun.	Nunavut
N.W.T.	Northwest Territories
Ont.	Ontario
P.E.I.	Prince Edward Island
Que.	Quebec
Sask.	Saskatchewan
SCU	special care unit
Y.T.	Yukon

Purpose

The *Data Quality Documentation, Discharge Abstract Database — Current-Year Information* report is produced on a yearly basis and provides information on the quality of the data file for the given fiscal year. An associated report, [Data Quality Documentation, Discharge Abstract Database — Multi-Year Information](#), provides background information to help users decide whether the data fits their needs. [Data Quality Documentation, Discharge Abstract Database — Glossary of Terms](#) is also available.

Information on how to complete the Discharge Abstract Database (DAD) abstract, including detailed data element descriptions and collection instructions, can be found in the [DAD Abstracting Manual](#). For a summary of the mandatory and optional DAD data elements, please refer to the [DAD Data Elements](#) document on CIHI's website.

Coverage

Levels of care and submissions, by province/territory

The DAD contains data on separations from acute inpatient institutions and selected day surgery, chronic, rehabilitation and psychiatric institutions. Data is collected on separations with a discharge date between April 1 and March 31 of the given fiscal year (see tables 1 to 4 in Appendix A).

- Submission of acute inpatient data to the DAD: Mandated by the provincial/territorial ministry/department of health in all provinces/territories except Quebec.
- Submission of day surgery data to the DAD: Mandated in all provinces/territories except Prince Edward Island, Nova Scotia, Quebec, Ontario and Alberta.
 - Prince Edward Island, Nova Scotia, Ontario and Alberta continue to submit their day surgery data to the NACRS, as in previous years.

Information about the National Ambulatory Care Reporting System (NACRS) can be found in the [NACRS Metadata — Data Quality Documentation](#).

- Quebec acute inpatient and day surgery data is submitted to CIHI via the ministère de la Santé et des Services sociaux du Québec. Information about the Hospital Morbidity Database (HMDB) can be found in the [HMDB Metadata — Data Quality Documentation](#).
- Analysts are advised to use Analytical Institution Type Codes to identify acute inpatient and day surgery separations.

Changes to the number of reporting institutions

Throughout the fiscal year, facilities may open, close or merge, resulting in changes to the number of reporting institutions.

- Acute and day surgery institution numbers no longer valid in the DAD in 2015–2016: 15 institutions (4 institutions closed, 10 institutions stopped submitting to the DAD and 1 facility amalgamated with another facility and reported as a new institution).
- New institution numbers in the DAD in 2015–2016: 7 institutions (1 from Alberta and 2 each from Ontario, British Columbia and Newfoundland and Labrador).

Rate of over-coverage

- The rate of over-coverage from potential extra acute and day surgery abstracts in the DAD in 2015–2016 was 0.002%. There were 37 acute care abstracts with potential duplicate records and 20 day surgery abstracts with potential duplicate records.

Rate of under-coverage

- There were no sources of under-coverage in the DAD in 2015–2016.

Non-response

Unit non-response refers to incomplete data that is submitted from institutions in the frame, whether at institution or record level.

Unit non-response rate at the institution level, due to institutions that did not submit any data to CIHI for the entire fiscal year:

- Nil in the DAD in 2015–2016

Unit non-response rate at the record level, due to missing abstracts for all or some periods in the DAD in 2015–2016:

- For acute inpatient abstracts: 0.013%. This was because 1 facility in Nova Scotia did not submit data for some periods in 2015–2016 (a total of 336 missing abstracts). All facilities that had no separations to report submitted data files indicating 0 separations.
- For day surgery abstracts: Nil.

DAD fields

- Missing, invalid and unknown values in DAD fields for 2015–2016: See Table 5 in Appendix A.
- DAD fields evolution by fiscal year: See Appendix B.

Appendix A: DAD data tables

The following tables are based on the population of reference for the current fiscal year; the Analytical Institution Type Code was used to identify acute and day surgery institutions. The level of care of an institution may change over time due to hospital mergers or closures, or if CIHI's validation processes or analyses determine that it was previously incorrectly assigned. The totals reported in these tables reflect the levels of care recorded in the DAD at the time of database closure.

Table 1 Number of valid Institution Numbers* used to report separations in the DAD, by province/territory and Analytical Institution Type for the population of reference, 2015–2016

Submitting province/territory	Acute care	Day surgery	Total
N.L.	30	15	45
P.E.I.	6	n/a	6
N.S.	33	n/a	33
N.B.	19	14	33
Que.	n/a	n/a	n/a
Ont.	168	n/a	168
Man.	73	26	99
Sask.	63	23	86
Alta.	95	n/a	95
B.C.	81	60	141
Y.T.	3	1	4
N.W.T.	4	3	7
Nun.	1	1	2
Total	576	143	719

Notes

* Although there were 726 valid acute and day surgery Institution Numbers on the DAD frame, 719 acute and day surgery Institution Numbers were used to report separations to the DAD in 2015–2016. This is because 2 acute and 5 day surgery institutions had no separations to report in 2015–2016.

n/a: Not applicable (Quebec institutions and day surgery institutions in Prince Edward Island, Nova Scotia, Ontario and Alberta are not part of the DAD frame).

Source

Discharge Abstract Database, 2015–2016, Canadian Institute for Health Information.

Table 2 Number of abstracts submitted to the DAD, by province/territory and Analytical Institution Type for the population of reference, 2015–2016

Submitting province/territory	Acute care	Day surgery	Total N (%)
N.L.	53,887	93,974	147,861 (4.4%)
P.E.I.	14,912	n/a	14,912 (0.4%)
N.S.	94,042	n/a	94,042 (2.8%)
N.B.	84,646	44,605	129,251 (3.8%)
Que.	n/a	n/a	n/a
Ont.	1,167,032	n/a	1,167,032 (34.7%)
Man.	130,380	109,076	239,456 (7.1%)
Sask.	140,715	119,696	260,411 (7.7%)
Alta.	404,515	n/a	404,515 (12.0%)
B.C.	441,887	450,261	892,148 (26.5%)
Y.T.	3,536	2,227	5,763 (0.2%)
N.W.T.	5,439	3,171	8,610 (0.3%)
Nun.	1,881	777	2,658 (0.1%)
Total	2,542,872	823,787	3,366,659 (100.0%)

Note

n/a: Not applicable (Quebec institutions and day surgery institutions in Prince Edward Island, Nova Scotia, Ontario and Alberta are not part of the DAD frame).

Source

Discharge Abstract Database, 2015–2016, Canadian Institute for Health Information.

Table 3 Percentage change in volume of DAD abstracts between 2014–2015 and 2015–2016, by province/territory and Analytical Institution Type for the population of reference

Submitting province/territory	Acute care	Day surgery	Total
N.L.	-0.33	4.54	2.71
P.E.I.	-3.33	n/a	-3.33
N.S.	0.31	n/a	0.31
N.B.	-1.76	2.10	-0.46
Que.	n/a	n/a	n/a
Ont.	0.97	n/a	0.97
Man.	-0.69	2.26	0.64
Sask.	0.11	-1.90	-0.82
Alta.	0.79	n/a	0.79
B.C.	0.61	4.10	2.34
Y.T.	11.34	-3.26	5.20
N.W.T.	3.56	-3.29	0.93
Nun.	-2.08	-7.94	-3.87
Total	0.59	2.82	1.13

Note

n/a: Not applicable (Quebec institutions and day surgery institutions in Prince Edward Island, Nova Scotia, Ontario and Alberta are not part of the DAD frame).

Source

Discharge Abstract Database, 2014–2015 and 2015–2016, Canadian Institute for Health Information.

Table 4 Number of abstracts submitted to the DAD, by province/territory and Analytical Institution Type, 2015–2016

Submitting province/territory	Acute care	Day surgery	Rehab.	Special rehab.	Chronic care	Psych.	Other*	Total
N.L.	53,887	93,974	0	0	0	1,325	0	149,186
P.E.I.	14,912	0	0	0	0	155	0	15,067
N.S.	94,042	0	492	135	0	930	0	95,599
N.B.	84,646	44,605	578	0	2,710	285	9,647	142,471
Que.	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Ont.	1,167,032	0	0	272	294	593	0	1,168,191
Man.	130,380	109,076	0	0	38	227	4,413	244,134
Sask.	140,715	119,696	0	0	40	0	0	260,451
Alta.	404,515	0	1,867	0	0	4,237	5,236	415,855
B.C.	441,887	450,261	595	0	0	378	0	893,121
Y.T.	3,536	2,227	0	0	0	0	0	5,763
N.W.T.	5,439	3,171	0	0	55	0	0	8,665
Nun.	1,881	777	0	0	0	0	0	2,658
Total	2,542,872	823,787	3,532	407	3,137	8,130	19,296	3,401,161

Notes

* Other levels of care include sub-acute, unclassified, home for the aged and organized outpatient.

n/a: Not applicable (Quebec institutions and day surgery institutions in Prince Edward Island, Nova Scotia, Ontario and Alberta are not part of the DAD frame).

Source

Discharge Abstract Database, 2015–2016, Canadian Institute for Health Information.

Table 5 Number of acute care and day surgery abstracts submitted to the DAD with missing, invalid or unknown values in selected mandatory fields, 2015–2016

Data elements	Number of acute and day surgery abstracts with missing, invalid or unknown values	Percentage of acute and day surgery abstracts with missing, invalid or unknown values
HCN	27,314	0.81
Province/Territory Issuing HCN	19,928	0.59
Postal Code*	23,931	0.71
Birthdate [†]	15	<0.01
Admission Time	290	0.01
Discharge Time	1,204	0.04
Most Responsible Diagnosis	14	<0.01
Principal Intervention	3	<0.01

Notes

* Full 6-character postal codes that were not found in the latest Postal Code Conversion File from Statistics Canada (2014 version) are deemed invalid. Mini-postal codes that refer to a Canadian province/territory or to persons who are transient/homeless are deemed unknown.

† Invalid and unknown dates of birth include the following:

- Birthdate of September 1, 9999; and
- Combination of Age Code *U* (*unknown*) and Age Units *0*.

Source

Discharge Abstract Database, 2015–2016, Canadian Institute for Health Information.

Appendix B: DAD field evolution by fiscal year

This information must be referenced when performing trending analysis on DAD data and is intended to be used in conjunction with the *DAD Abstracting Manual* (see Bibliography). Please refer to the [DAD Abstracting Manual](#) or contact CIHI for details behind these changes.

Legend	
*	No change to existing field
C	Change in field definition (including code value or collection instruction)
F	Change in field format
D	Deleted field
N	New field
O	Field did not exist that year

ICD-10-CA/CCI Abstract

Group and field no.	Field	2004–2005	2005–2006	2006–2007	2007–2008	2008–2009	2009–2010	2010–2011	2011–2012	2012–2013	2013–2014	2014–2015	2015–2016
01 01	Institution Number	*	*	*	*	*	*	*	F	*	*	*	*
01 02	Batch Count	O	O	O	O	O	O	O	O	O	O	N	*
01 03	Batch Year	*	*	*	*	*	*	*	*	*	*	*	*
01 04	Batch Period	*	*	*	*	*	*	*	*	*	*	*	*
01 05	Batch Number	*	*	*	*	*	*	*	*	*	*	*	*
01 06	Abstract Number	*	*	*	*	*	*	*	*	*	*	*	*
01 08	Coder Number	*	*	*	*	*	F	*	*	*	*	*	*
01 09	Chart Number	*	*	*	*	*	*	*	*	*	*	*	*
01 10	Register Number	*	*	*	*	*	*	*	*	*	*	*	*
01 11	Second Chart/ Register Number	*	*	*	*	*	*	*	*	*	*	*	*

Group and field no.	Field	2004–2005	2005–2006	2006–2007	2007–2008	2008–2009	2009–2010	2010–2011	2011–2012	2012–2013	2013–2014	2014–2015	2015–2016
01 12	Maternal/ Newborn Chart/Register Number	*	C	*	*	*	*	*	*	*	C	*	C
03 01	Health Care Number	*	*	*	F	C, F	C	*	*	*	*	C	C
03 02	Postal Code	*	*	*	C	*	*	*	C	*	*	*	*
03 03	Residence Code	*	*	*	*	*	*	*	*	*	*	*	*
03 04	Gender	*	*	*	*	*	*	*	*	*	*	*	*
03 05	Province/ Territory Issuing HCN	*	*	*	*	C	C	*	*	*	*	*	*
03 06	Responsibility for Payment	*	*	*	*	*	*	*	*	*	*	C	*
03 08	Birthdate	*	*	*	*	*	*	*	C	*	*	*	*
03 09	Birthdate Is Estimated	*	*	*	*	*	*	*	C	*	*	*	*
03 11–27	Provincial/ Territorial Ancillary Data	*	*	*	*	*	*	C	*	*	*	*	*
04 01	Admission Date	*	*	*	*	*	*	*	*	*	*	*	*
04 02	Admission Time	*	*	*	*	*	*	*	C	*	*	*	*
04 04	Institution From	*	*	*	C	*	*	*	*	*	*	*	*
04 05	Admit Category	*	*	*	*	C	*	*	*	*	*	*	C
04 06	Entry Code	*	*	*	*	*	*	C	*	*	*	*	*
04 07	Admit via Ambulance	*	F	C, F	*	*	*	*	*	C	*	*	*
04 08	Readmission Code	*	C	*	*	C	*	*	*	*	*	*	C
04 11	ER Decision to Admit Date	*	*	*	D	O	O	O	O	O	O	O	O
04 12	ER Decision to Admit Time	*	*	*	D	O	O	O	O	O	O	O	O

Group and field no.	Field	2004–2005	2005–2006	2006–2007	2007–2008	2008–2009	2009–2010	2010–2011	2011–2012	2012–2013	2013–2014	2014–2015	2015–2016
04 13	Date Patient Left ED	*	*	*	*	*	*	*	*	*	*	*	*
04 14	Time Patient Left ED	*	F	*	*	*	C	*	*	*	*	*	*
05 01	Discharge Date	*	*	C	*	C	*	C	*	*	*	*	*
05 02	Discharge Time	*	*	C	*	C	*	*	C	*	*	*	*
05 04	Institution To	*	*	*	*	*	*	*	*	*	*	*	*
05 05	Discharge Disposition	*	*	*	*	C, F	*	*	*	*	*	*	*
07 01	Main Patient Service	*	*	C	*	*	*	*	*	*	*	*	*
07 02	Main Patient Subservice	*	*	*	*	*	*	*	*	*	*	*	*
07 03	Weight	*	*	*	*	*	*	*	*	*	*	C	*
07 04	Abstract Overflow	*	*	*	*	*	*	*	*	*	*	*	*
08 01	Service Transfer	*	*	C	*	*	*	*	*	*	*	C	*
08 02	Service Transfer Subservice	*	*	*	*	*	*	*	*	*	*	*	*
08 03	Service Transfer Days	*	*	*	*	*	*	*	*	*	*	*	*
09 01	Provider Type	*	*	*	*	C, F	C	*	*	*	C	C	*
09 02	Provider Number	*	*	*	*	*	*	*	*	*	C, F	*	*
09 03	Provider Service	*	F	*	C	F	C	C	C	C	C	C	*
10 01	Diagnosis Prefix	*	*	*	*	F	C	C	*	C	C	*	*
10 02	Diagnosis Code	*	C	*	*	*	*	*	*	*	*	*	*
10 03	Diagnosis Cluster	O	O	O	O	O	N	*	*	C	*	*	*
10 04	Diagnosis Type	C	F	*	C	C	*	*	*	C	*	*	C

Group and field no.	Field	2004–2005	2005–2006	2006–2007	2007–2008	2008–2009	2009–2010	2010–2011	2011–2012	2012–2013	2013–2014	2014–2015	2015–2016
10 05–11	Cancer Staging	*	*	*	*	*	*	*	*	*	*	*	*
11 01	Procedure/ Intervention Date	*	*	*	C	C	D	O	O	O	O	O	O
11 01	Intervention Episode Start Date	O	O	O	O	O	N	*	*	*	*	*	*
11 02	Procedure/ Intervention Code	*	*	*	*	C	*	*	*	*	*	*	*
11 03/05	Intervention Attributes	*	*	*	*	*	*	*	*	*	*	*	*
11 06	Intervention Provider Number	*	*	*	*	*	*	*	C	*	C, F	*	*
11 07	Intervention Provider Service	*	*	*	*	*	*	*	*	*	C	*	*
11 08	Tissue Code	*	*	*	*	*	*	*	*	*	*	*	*
11 09	Intervention Time	*	*	*	*	*	D	O	O	O	O	O	O
11 10	Intervention Location	*	*	*	*	C	C	C	*	*	*	*	*
11 11	Anaesthetist	*	*	C	*	*	*	*	*	*	C, F	C	*
11 12	Anaesthetic Technique	*	F	*	*	C	C	C	*	*	C, F	C	C, F
11 13	Out-of-Hospital Indicator	*	*	*	*	C	C	C	*	*	C	*	C
11 14	Out-of-Hospital Institution Number	*	*	*	*	*	*	C	*	*	*	*	F
11 15	Unplanned Return to Intervention Location	*	*	*	*	*	*	*	*	*	*	*	*

Group and field no.	Field	2004–2005	2005–2006	2006–2007	2007–2008	2008–2009	2009–2010	2010–2011	2011–2012	2012–2013	2013–2014	2014–2015	2015–2016
11 16	Died in OR (name changed in 2012)	*	*	*	*	C	C	C	*	D	O	O	O
11 16	Died During Intervention (name changed in 2012)	O	O	O	O	O	O	O	O	N	C	*	*
11 17	Intervention Episode Start Time	O	O	O	O	O	N	*	*	*	*	*	*
11 18	Intervention Episode End Date	O	O	O	O	O	N	*	*	*	*	*	*
11 19	Intervention Episode End Time	O	O	O	O	O	N	*	*	*	*	*	*
11 20	Intervention Pre-Admit Flag	O	O	O	O	O	N	C	C	C	*	*	*
13 01	SCU Death Indicator	*	*	*	*	*	*	*	*	C	*	*	*
13 02	SCU Unit Number	*	*	*	*	F	C	*	*	*	*	*	C
13 03	SCU Admit Date	*	*	*	*	*	*	*	*	*	*	*	*
13 04	SCU Admit Time	*	*	*	*	*	*	*	C	*	*	*	*
13 05	SCU Discharge Date	*	*	*	*	*	*	*	*	*	*	*	*
13 06	SCU Discharge Time	*	*	*	*	*	*	*	C	*	*	*	*
13 09	Glasgow Coma Scale	*	*	*	*	*	*	C	*	C	C	*	*
14 01–19	Basic Options	*	*	*	F	*	*	C	*	*	*	*	*
15 02–14	Mental Health Indicators	*	*	*	*	C	*	C	*	*	C	*	C

Group and field no.	Field	2004–2005	2005–2006	2006–2007	2007–2008	2008–2009	2009–2010	2010–2011	2011–2012	2012–2013	2013–2014	2014–2015	2015–2016
16 01–18	Project Information	*	*	C	F	*	*	C	C	C	C	C, F	C, F
17 01–07	Blood Information	*	*	*	*	*	*	*	*	*	C	C	*
18 01–12	Reproductive Care	*	*	C	*	*	*	*	C	C	C	C	C
19 01–04 06–15 20–24	Vendor-Assigned Values	*	*	*	F	*	*	*	*	C	*	*	*

Contact

For more information, please contact CIHI by sending an email to cad@cihi.ca.

Bibliography

Canadian Institute for Health Information. [DAD Abstracting Manual, 2015–2016](#). 2015.

Canadian Institute for Health Information. [DAD Data Elements 2015–2016](#). 2015.

Canadian Institute for Health Information. [Data Quality Documentation, Discharge Abstract Database — Glossary of Terms](#). 2012.

Canadian Institute for Health Information. [Data Quality Documentation, Discharge Abstract Database — Multi-Year Information](#). 2012.

Canadian Institute for Health Information. [Data Quality Documentation, Hospital Morbidity Database — Current-Year Information, 2014–2015](#). 2015.

Canadian Institute for Health Information. [Data Quality Documentation, Hospital Morbidity Database — Multi-Year Information](#). 2013.

Canadian Institute for Health Information. [Data Quality Documentation, National Ambulatory Care Reporting System — Current-Year Information, 2015–2016](#). 2016.

Canadian Institute for Health Information. [Data Quality Documentation, National Ambulatory Care Reporting System — Multi-Year Information](#). 2012.



Talk to us

CIHI Ottawa

495 Richmond Road
Suite 600
Ottawa, Ont.
K2A 4H6
613-241-7860

CIHI Toronto

4110 Yonge Street
Suite 300
Toronto, Ont.
M2P 2B7
416-481-2002

CIHI Victoria

880 Douglas Street
Suite 600
Victoria, B.C.
V8W 2B7
250-220-4100

CIHI Montréal

1010 Sherbrooke Street West
Suite 602
Montréal, Que.
H3A 2R7
514-842-2226