



Data Quality Documentation, Discharge Abstract Database

Current-Year Information

2016–2017



Canadian Institute
for Health Information

Institut canadien
d'information sur la santé

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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.....	6
Appendix A: DAD data tables.....	7
Appendix B: DAD field evolution by fiscal year	12
Contact	17
Bibliography	17

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 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.
 - P.E.I., Nova Scotia, Ontario and Alberta continue to submit their day surgery data to the NACRS, as in previous years.

Information about NACRS can be found on the [NACRS Metadata](#) page.

- 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 HMDB can be found on the [HMDB Metadata](#) page.
- 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 2016–2017: 10 institutions (3 institutions closed, 5 institutions stopped submitting to the DAD and 2 facilities amalgamated with another facility and reported as a new institution)
- New Institution Numbers in the DAD in 2016–2017: 2 institutions (both from Ontario)

Rate of over-coverage

- The rate of over-coverage from potential extra acute and day surgery abstracts in the DAD in 2016–2017 was 0.002%. There were 36 acute care abstracts with potential duplicate records and 30 day surgery abstracts with potential duplicate records.

Rate of under-coverage

- There were no sources of under-coverage in the DAD in 2016–2017.

Non-response

Unit non-response refers to incomplete data that is submitted from institutions in the frame, whether at the 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 2016–2017

Unit non-response rate at the record level, due to missing abstracts for all or some periods in the DAD in 2016–2017:

- For acute inpatient abstracts: 0.048%. This was because 1 facility in Nunavut did not submit data for some periods in 2016–2017 (a total of 1,237 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 2016–2017: 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, 2016–2017

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.	166	n/a	166
Man.	72	26	98
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	573	143	716

Notes

* Although there were 744 valid acute and day surgery Institution Numbers on the DAD frame, 716 acute and day surgery Institution Numbers were used to report separations to the DAD in 2016–2017. This is because 24 acute and 4 day surgery institutions had no separations to report in 2016–2017.

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, 2016–2017, 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, 2016–2017

Submitting province/territory	Acute care	Day surgery	Total N (%)
N.L.	54,394	96,809	151,203 (4.4%)
P.E.I.	15,273	n/a	15,273 (0.4%)
N.S.	94,326	n/a	94,326 (2.8%)
N.B.	84,822	43,842	128,664 (3.8%)
Que.	n/a	n/a	n/a
Ont.	1,178,836	n/a	1,178,836 (34.6%)
Man.	131,051	111,880	242,931 (7.1%)
Sask.	142,153	125,204	267,357 (7.8%)
Alta.	403,957	n/a	403,957 (11.8%)
B.C.	450,669	461,391	912,060 (26.7%)
Y.T.	3,523	2,209	5,732 (0.2%)
N.W.T.	5,422	3,450	8,872 (0.3%)
Nun.	845	879	1,724 (0.1%)
Total	2,565,271	845,664	3,410,935 (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, 2016–2017, Canadian Institute for Health Information.

Table 3 Percentage change in volume of DAD abstracts between 2015–2016 and 2016–2017, by province/territory and Analytical Institution Type for the population of reference

Submitting province/territory	Acute care	Day surgery	Total (%)
N.L.	0.94	3.02	2.26
P.E.I.	2.42	n/a	2.42
N.S.	0.30	n/a	0.30
N.B.	0.21	-1.71	-0.45
Que.	n/a	n/a	n/a
Ont.	1.01	n/a	1.01
Man.	0.51	2.57	1.45
Sask.	1.02	4.60	2.67
Alta.	-0.14	n/a	-0.14
B.C.	1.99	2.47	2.23
Y.T.	-0.37	-0.81	-0.54
N.W.T.	-0.31	8.80	3.04
Nun.	-55.08*	13.13	-35.14
Total	0.88	2.66	1.32

Notes

* The large percentage change in Nunavut is caused by the missing 1,237 abstracts..

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 and 2016–2017, Canadian Institute for Health Information.

Table 4 Number of abstracts submitted to the DAD, by province/territory and Analytical Institution Type, 2016–2017

Submitting province/territory	Acute care	Day surgery	Rehab.	Special rehab.	Chronic care	Psych.	Other*	Total
N.L.	54,394	96,809	0	0	0	1,338	0	152,541
P.E.I.	15,273	0	0	0	0	142	0	15,415
N.S.	94,326	0	533	151	0	885	0	95,895
N.B.	84,822	43,842	545	0	3,033	291	9,886	142,419
Que.	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Ont.	1,178,836	0	0	338	288	493	0	1,179,955
Man.	131,051	111,880	0	0	405	207	60	243,603
Sask.	142,153	125,204	0	0	39	0	0	267,396
Alta.	403,957	0	1,827	0	0	4,066	5,197	415,047
B.C.	450,669	461,391	603	0	0	409	0	913,072
Y.T.	3,523	2,209	0	0	0	0	0	5,732
N.W.T.	5,422	3,450	0	0	47	0	0	8,919
Nun.	845	879	0	0	0	0	0	1,724
Total	2,565,271	845,664	3,508	489	3,812	7,831	15,143	3,441,718

Notes

* Other levels of care include sub-acute, unclassified, home for the aged and organized outpatient. During 2016–2017, partial-year data from 22 Manitoba nursing stations was submitted to the DAD. Prior to 2016–2017, the DAD contained full-year data from those nursing stations. As of this year, a decision was made to discontinue submission. The partial-year counts from the 22 nursing stations in Manitoba are not included in this report.

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, 2016–2017, 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, 2016–2017

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	28,539	0.84
Province/Territory Issuing HCN	21,854	0.64
Postal Code*	30,092	0.88
Birthdate [†]	17	<0.01
Admission Time	311	0.01
Discharge Time	366	0.01
Most Responsible Diagnosis	12	<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 (2015 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, 2016–2017, 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 on 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	2005–2006	2006–2007	2007–2008	2008–2009	2009–2010	2010–2011	2011–2012	2012–2013	2013–2014	2014–2015	2015–2016	2016–2017
01 01	Institution Number	*	*	*	*	*	*	F	*	*	*	*	*
01 02	Batch Count	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	2005–2006	2006–2007	2007–2008	2008–2009	2009–2010	2010–2011	2011–2012	2012–2013	2013–2014	2014–2015	2015–2016	2016–2017
01 12	Maternal/ Newborn Chart/Register Number	C	*	*	*	*	*	*	*	C	*	C	C
03 01	Health Care Number	*	*	F	C, F	C	*	*	*	*	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	C
04 06	Entry Code	*	*	*	*	*	C	*	*	*	*	*	*
04 07	Admit via Ambulance	F	C, F	*	*	*	*	*	C	*	*	*	*
04 08	Readmission Code	C	*	*	C	*	*	*	*	*	*	C	C
04 11	ER Decision to Admit Date	*	*	D	O	O	O	O	O	O	O	O	O
04 12	ER Decision to Admit Time	*	*	D	O	O	O	O	O	O	O	O	O
04 13	Date Patient Left ED	*	*	*	*	*	*	*	*	*	*	*	*

Group and field no.	Field	2005–2006	2006–2007	2007–2008	2008–2009	2009–2010	2010–2011	2011–2012	2012–2013	2013–2014	2014–2015	2015–2016	2016–2017
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	N	*	*	C	*	*	*	*
10 04	Diagnosis Type	F	*	C	C	*	*	*	C	*	*	C	C
10 05–11	Cancer Staging	*	*	*	*	*	*	*	*	*	*	*	*
11 01	Procedure/ Intervention Date	*	*	C	C	D	O	O	O	O	O	O	O
11 01	Intervention Episode Start Date	O	O	O	O	N	*	*	*	*	*	*	*

Group and field no.	Field	2005–2006	2006–2007	2007–2008	2008–2009	2009–2010	2010–2011	2011–2012	2012–2013	2013–2014	2014–2015	2015–2016	2016–2017
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	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	C, F
11 13	Out-of-Hospital Indicator	*	*	*	C	C	C	*	*	C	*	C	C
11 14	Out-of-Hospital Institution Number	*	*	*	*	*	C	*	*	*	*	F	F
11 15	Unplanned Return to Intervention Location	*	*	*	*	*	*	*	*	*	*	*	*
11 16	Died in OR (name changed in 2012)	*	*	*	C	C	C	*	D	O	O	O	O
11 16	Died During Intervention (name changed in 2012)	O	O	O	O	O	O	O	N	C	*	*	*
11 17	Intervention Episode Start Time	O	O	O	O	N	*	*	*	*	*	*	*

Group and field no.	Field	2005–2006	2006–2007	2007–2008	2008–2009	2009–2010	2010–2011	2011–2012	2012–2013	2013–2014	2014–2015	2015–2016	2016–2017
11 18	Intervention Episode End Date	O	O	O	O	N	*	*	*	*	*	*	*
11 19	Intervention Episode End Time	O	O	O	O	N	*	*	*	*	*	*	*
11 20	Intervention Pre-Admit Flag	O	O	O	O	N	C	C	C	*	*	*	*
13 01	SCU Death Indicator	*	*	*	*	*	*	*	C	*	*	*	*
13 02	SCU Unit Number	*	*	*	F	C	*	*	*	*	*	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	C
16 01–18	Project Information	*	C	F	*	*	C	C	C	C	C, F	C, F	C, F
17 01–07	Blood Information	*	*	*	*	*	*	*	*	C	C	*	*
18 01–12	Reproductive Care	*	C	*	*	*	*	C	C	C	C	C	C
19 01–04 06–15 20–24 *NEW*	Vendor-Assigned Values	*	*	F	*	*	*	*	C	*	*	*	*

Contact

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

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