

Provincial Discharge Abstract Database (PDAD)

User Guide v.1.0

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Provincial Discharge Abstract Database

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1 Provincial Discharge Abstract Database

1.1 Introduction

This internal document is considered the primary reference for Centre staff working with the Provincial Discharge Abstract Database (PDAD). It is intended to provide staff with information related to the collection, processing, storage, use and disclosure of information contained within this key provincial health information system. For detailed procedures related to the system, please reference the NLCHI 3M System User's Manual.

This document is reviewed annually and revised as needed to ensure it remains current and useful. Feedback from readers is welcomed. Suggestions for future updates can be sent to the Manager Clinical and Administrative Standards, Data and Information Services (DaIS).

1.2 Description of PDAD

PDAD was developed as a replacement to the Clinical Database Management System (CDMS), which was developed in the mid-1990's as the provincial repository containing administrative, demographic and clinical data related to patients receiving in-patient and surgical day care (SDC) services from acute care facilities in Newfoundland and Labrador (NL). For select years, a small number of facilities submitted chronic care and medical day care data to the DAD, which was included in PDAD.

All health care facilities in the province that provide acute and/or surgical day care services report to Canadian Institute for Health Information (CIHI) via Discharge Abstract Database (DAD). CIHI provides the Centre with a copy of the data submitted by all health care facilities in Newfoundland and Labrador.

PDAD was implemented in 2014-15 to import files from the previous CDMS from 2001-02 as well as the DAD files received from CIHI. For information from CDMS prior to 2001, please refer to the Clinical Database Management System (CDMS) Master Methodology 1994/95-2000/01.

1.3 Purpose of PDAD

This database is used primarily for health system planning and management, information requests and research related to in-patient and surgical day care (SDC) services provided by acute care facilities in Newfoundland and Labrador (NL). For inpatient and SDC services provided to residents of NL in other Canadian provinces, please refer to the Out-of-Province (OOPDAD) User Guide.

1.4 Population Reference Coverage

The PDAD contains records for in-patient and SDC services provided to residents and non-residents by acute care facilities in Newfoundland and Labrador. [Appendix 3](#) contains a list of submitting facilities and their applicable years of data submission.

1.5 Reporting Period

The reporting period for PDAD is based upon the fiscal year, April 1 to March 31.

1.6 Years Available

PDAD contains complete data for fiscal years 2001/02 to 2021-22, as well as open year data for 2022-23. Data is refreshed monthly.

1.7 Patient Identification

All episodes are assigned a unique Episode Identifier. Any linkage of Care Episodes to individual patients is done following extract from PDAD.

2 Data Source(s)

1.1 Origin of data

Data originates at the participating health care facilities.

2.1 Data Flow

All reporting facilities complete an abstract for each inpatient or surgical day care encounter and submit these through the DAD submission process to CIHI. This process will accept or reject abstracts. If the abstract is rejected a report is sent back to the facility for deletion, correction and resubmission. When the abstract is accepted, an edit process is performed and errors are sent back to the originating facility for correction and resubmission.

CIHI sends a monthly cumulative file and a year-end file to the Centre. The monthly cumulative files and the year-end file are uploaded into PDAD. Edits are run in November, April and on the year-end file. Performing edits on the open year data allows the regions to correct the records and resubmit prior to file closure, allowing for improved data quality.

2.2 Data Collection and Processing Time Lines

Daily: Facilities are expected to complete abstracts on each discharge within 90 days from the last day of the month of discharge. For example, if a patient is discharged during the month of March, the facility is expected to have the data submitted by the last working day in June.

Monthly: As fiscal periods (months) are completed, facilities submit completed abstracts to CIHI.

Annually: The deadline for abstract submissions for 2021/22 was the last business day in May (soft closure to allow for late submissions and data quality corrections). The hard closure of the database is the last business day in June, and no abstracts are accepted into the database following that date.

CIHI supplies the year-end data file to NLCHI within ten days of the file closure.

3 Data Elements and Specifications

The data contained within the PDAD is essentially a ‘copy’ of the data submitted to the CIHI Discharge Abstract Database; therefore the data elements are intricately tied to the data standards of the DAD. Data elements in the DAD have frequently undergone revisions and enhancements over the years. These changes are often mirrored in the provincial PDAD.

The DAD abstract contains many data elements, some of which are mandatory for all data submissions, while others are mandatory in specific provinces. The abstract also contains optional data elements which can be collected to meet local needs.

A longitudinal extract is provided using the 3M HDM Shadow database, which includes all years of data. The list of Shadow tables and descriptions can be found in [Appendix 1](#).

A comprehensive Data Dictionary is stored with the data tables and includes the mapping from CDMS and CIHI to the PDAD. The Data Dictionary also outlines whether a data element is mandatory, conditional mandatory, optional, or added value.

4 Data Quality Processes

4.1 Edit /Correction Process

Data contained in PDAD is edited at several points along the data management pathway:

- Regional health authorities/facilities have edits built into their local abstracting systems to check data during the abstracting/coding process and prior to submission to CIHI.
- CIHI has a rigorous edit process and returns abstracts with errors to the originating facility for correction.
- NLCHI conducts an edit process on the monthly files from CIHI in November, April, June if necessary, and on the year-end file. Identified errors are returned to the facility for correction or verification and resubmission, if possible. NLCHI edits are run until all possible corrections are completed.
- Due to the requirement and the importance of valid MCP numbers to support the de-identification process, the Centre runs several MCP edits.

4.2 Edit Classification

For both CIHI and NLCHI edits there are two edit classifications, fatal and warning. Fatal edits indicate that the data in a mandatory field is unacceptable and in most situations is corrected. A warning edit indicates that the data in the field may be correct but warrants confirmation before finalizing.

4.3 Edit Process Results

Year	Total # Records Edited	Total # Errors Identified		Total # Outstanding Fatal Errors After Corrections	Outstanding Error Rate	Number of Records with one or more outstanding errors
		Fatal	Warning			
2016	152,656	453	221	0	0	0
2017	150,238	234	273	0	0	0
2018	151,400	167	863	2	0.002%	2
2019	145,915	390	348	1	0.001%	1
2020	120,207	286	393	0	0	0
2021	136,385	320	2403*	5	0.004%	5

* Beginning in 2021, edits were completed to ensure newborn HCNs were updated

4.4 Maintenance Procedure

This is a dynamic dataset therefore users should be aware of past data element changes and that changes are likely to occur in the future. Due to these ongoing changes, data elements have been added, revised or classified as inactive over time. Data elements that are deemed inactive are no longer entered into the dataset. However for historical purposes these data elements and their values remain in the dataset (for the previous years). Please refer to the DAD publications for a detailed list of data elements and acceptable values.

Occasionally adjustments are required to align the data. For example, an element value may change, such as the acronym for Newfoundland and Labrador changed several times over the past years. Alternately, end users of PDAD data may identify data quality issues. When an issue is reported to DaIS staff, corrective and/or preventative action may be taken.

Regional health authorities may identify a major data quality issue within their data and correct the information in their source systems. Regional staff are asked to notify the Centre in such circumstances; depending on the corrections applied, the decision may be made to update PDAD with the corrected information.

A complete list of changes is documented in [Appendix 4](#), Known PDAD Facts.

5 Uses of Data

The data contained within PDAD is used primarily for analytics and evaluation of in-patient and SDC health services provided within the province, as well as for research purposes. The DaIS department at the Centre provides clinical aggregate statistical information and reports to government agencies, health care managers, clinicians, and other stakeholders to assist in planning, evaluation and evidence-based decision making. Stakeholders include the following organizations and agencies:

- Department of Health and Community Services
- Newfoundland and Labrador Statistics Agency-Community Accounts
- Regional Health Authorities
- Researchers

- Vital Statistics

Data may be disclosed to requestors in accordance with the Centre's privacy and confidentiality policies upon request and approval by the Secondary Users Committee.

The Centre also uses this data to cross reference with other datasets for quality assurance and verification purposes.

6 Changes to Database

6.1 Methodological Changes

The International Statistical Classification of Diseases and Related Health Problems 10th Revision Canadian Edition (ICD-10-CA) and Canadian Classification of Health Interventions (CCI) is the classification system used to code data for fiscal year 2001-02 onward.

CIHI governs ICD-10-CA and CCI and has released seven versions: 2001, 2003, 2006, 2009, 2012, 2015, and 2018. This is the coding classification tool used by Health Information Management professionals to identify health conditions and interventions. Although not fundamentally different, there are changes that may impact research results, for example, diabetes mellitus codes have changed significantly over the years. It is important when using PDAD data to be aware of the applicable version(s) which apply to the data in use.

Abstracting is governed by the Discharge Abstract Database standards. These are published annually by CIHI and provide guidance for completion of each data element on the DAD abstract. There have been significant changes to data elements over the years; the DAD standards must be referenced to understand these changes.

6.2 Revision History

In April 2001, a redevelopment of the DAD was introduced along with the new classification system, ICD-10-CA/CCI.

A case-mix grouping methodology is applied to all data in PDAD. From April 1, 2001 to March 31, 2007, inpatient data was initially grouped using the Case Mix Group Plx methodology. However, this was later updated to a methodology more compatible with the ICD-10/CCI classification system, Case Mix Group plus (CMG+). Data files that were coded in ICD-10/CCI as of April 1, 2001 and initially grouped by CMG Plx are historically regrouped by CIHI using CMG+.

Surgical Day Care abstracts are grouped according to the Day Procedure Group methodology (DPG) for Fiscal years 2001-02 to 2010-11. Effective Fiscal 2011-2012, the Comprehensive Ambulatory Classifications System (CACS) grouping methodology was developed and is used to group DAD day surgery data. The new CACS grouping methodology uses the investigative technology (diagnostic imaging) interventions found

on the day surgery abstract to adjust the RIW. Surgical Day Care data from 2006/07 to 2010/11 was historically regrouped using the CACS methodology.

Note: Users should exercise caution when comparing case mix assignments of data grouped using different grouping methodologies. Depending on the methodology used, the same abstract could be grouped to a different CMG and be assigned different values for RIW (Resource Intensity Weights) and ELOS (Expected Length of Stay). CIHI provides the province with historically regrouped data for a five year period which supports comparability over that five year period.

The DaIS Department utilizes regrouped data using the CMG+ methodology from 2001 to 2021. This data is presented in five year increments based upon the most current CMG+ methodology. For example 2010 to 2014 data was regrouped using 2015 methodology. For a graphic visualization showing grouping availability, see [Appendix 2](#).

6.3 Other significant changes

In 2003, the acronym for Newfoundland and Labrador was changed from NF to NL. This impacted the methodology used to uniquely identify patients. The PDAD methodology was updated and past values were revised to ensure the integrity of unique patient identification.

Beginning April 1, 2000 the General Hospital, Health Sciences Centre (001), St. Clare's Mercy Hospital (003), and Waterford Hospital (061) consolidated facility numbers and began submitting to CIHI under facility 001. In 2013/14, the General Hospital, Health Sciences Centre (215), St. Clare's (214) and the Waterford (216) began reporting under separate numbers. The Janeway reports under 215 as part of the General Hospital, Health Science Centre.

6.4 Reference Material

The following reference materials are available from the Manager, Clinical and Administrative Standards, DaIS:

- DAD Abstracting Manual 2001/02 to 2021/22: outlines the data elements, expected values and applicable CIHI edits
- Canadian Coding Standards v2001 to v2018: provides guidelines for coding specific to health conditions and interventions
- Edit Specifications 2001/02 to 2021/22: contains a list of provincial edits performed on PDAD data
- Provincial Mandates: provincial coding and abstracting standards. These are posted on the Centre's website: <https://www.nlchi.nl.ca/index.php/quality-information/standards/clinical-standards-and-information>. For historical reference,

rescinded standards are available from the Manager, Clinical and Administrative Standards, DaIS.

- CIHI monthly (accumulative) Management Reports 2001/02 to 2021/22
- CIHI hard error reports
- List of tables and associated fields in PDAD. Prior to 2000, paper copies of the DAD are available from HAES staff. From 2001 onward electronic copies of the DAD are available at: K:\HAES\818 CIHI National Databases\ -01 DAD Discharge Abstract Database\ -02, and Core Sections of Newfoundland and Labrador specific DAD information can be found at: K:\DQS\818 CIHI National Databases\ -01 DAD Discharge Abstract Database\ -03 Provincial Section.

7 Data Quality Limitations

7.1 Data Quality Gaps

For select years, a small number of facilities submitted chronic care and medical day care data to the DAD, which was in turn included in PDAD. [Appendix 3](#) contains a list of facilities and their associated level of care.

7.2 Contributors Impact on Data Quality

For the fiscal year 2001/02, the former Peninsulas Health Care Corporation (Burin Peninsula Health Care Centre, Bonavista Health Care Centre and Dr. G.B. Cross Memorial Hospital) and Baie Verte Peninsula Health Care Centre, did not meet CIHI's year-end deadline. This data was accepted into PDAD. It is important to note that when comparing PDAD to the DAD file for this period and these facilities, discrepancies will occur. As these records were not submitted to CIHI, the CIHI added values such as RIWs, and CMG+ etc. are not available for these records.

Caution should be exercised when using chronic care and medical day care information. Chronic care data was not reported by all facilities in any given year. As of 2008/09, no facilities reported medical day care data and only the Waterford Hospital continues to report chronic care data.

The Janeway began reporting newborns under facility number 001 as of April 1, 2005. As of 2013/14, the Janeway reports under General Hospital, Health Sciences Centre 215.

CIHI generally will not accept submissions past the year-end deadline. In order to ensure PDAD contains a full provincial dataset, PDAD can accept late submissions. However this practice can result in a significant discrepancy between PDAD and the NL file within the DAD, depending on the volume of records involved.

The complete list of known PDAD facts related to clinical and non-clinical data can be found in [Appendix 4](#).

7.3 Data Quality Initiatives

It may become apparent that an element's specific values are not as expected. Targeted review and evaluation of these elements is carried out to ensure data quality.

As part of data quality evaluation HIM professionals extract elements and analyze for completeness and accuracy.

8 Access

8.1 Access to PDAD

Access to PDAD is granted by the Manager Clinical Standards and Information on an individual basis, based on job responsibilities. Authorized users access the TEST database and the Production database which are housed in the NLCHI Information Management System (NIMS).

Positions that have access to the database include:

- Manager Clinical and Administrative Standards, DaIS
- Health Record Analyst, DaIS
- HIM Consultant, DaIS
- Data Entry Operator, DaIS
- Epidemiologists, DaIS, when required
- Health Data Consultant, DaIS
- System Administrators, Infrastructure and Information Protection
- 3M System Administrators, limited access in accordance with NLCHI vendor access procedures

8.2 Privacy and Confidentiality Responsibilities

The Centre has a Secondary Use Committee that reviews applications for aggregate and record level requests for data. Approval is granted in accordance with applicable legislative authority and organizational policy.

8.3 Audit Trail

8.3.1 Audit Trail

The 3M HDM System uses Windows event logging. This enables the logging of events from various applications to be written to log files and then viewed in the Event Viewer application.

All events that occur within the HDM application are logged to the Event Viewer's application log. The types of events that logged may be seen below.

3M HDM Audit Events

Event ID	Event Name	Event Description
1000	Login Successful	User logged in successfully
1001	Logout Successful	User logged out
1002	Login Failed	Unknown user name or bad password
1003	Login Failed – 3M Account Locked	Account locked due to consecutive failed login attempts
1004	Read/Search	A patient search was performed
1005	Read (worklist)	A Work list window was presented to the user
1006	Read (Encounter List)	An Encounter List window was presented to the user
1007	Read (Edit Record)	An Edit Record window was presented to the user
1008	Read/Export	A record(s) export was performed
1009	Read/Reporter	A Reporter read was performed
1010	Write/Modify	An MPI or encounter record has been modified
1011	Record Delete	An MPI or encounter record was deleted
1012	Encounter Move to MRN	An encounter record was moved to a different MRN
1013	Write/Reporter	A Reporter write was performed

8.4 Storage/Retrieval

Source documents used to create the dataset are kept indefinitely.

The electronic dataset is maintained indefinitely and is stored on a secure server at the Centre.

Only the Infrastructure Department’s staff has access to the backup files. The Centre uses the GFS (Grandfather-Father-Son) method to backup data. The backups are organized into Daily, Weekly, and Monthly. The Daily tapes are retained for 1 week. Weekly tapes are retained for 5 weeks, and Monthly tapes are retained for 1 year. The Centre also performs an annual backup with no specified retention period. The annual tapes are archived and are not reused.

8.5 De-identification Process

A longitudinal extract of the PDAD data is de-identified to allow for linkage across multiple data sources and provide the least amount of identifiable information required for use. Access to identifiable information is only provided when absolutely necessary.

The de-identification process is outlined in detail in the DaIS Data De-identification and Re-identification Procedure.

9 Comparability

PDAD can be used to cross reference for verification and data quality validation with other database/sets, For example, comparing the number of live births per facility in PDAD with number of live births per facility in NLCHI Live Birth System.

10 Education

When the need for education related to the PDAD is identified, the Centre will develop and deliver appropriate education. Where applicable, this will be done in conjunction with regional health authorities and/or CIHI.

Appendix 1: 3M Shadow Extract Table Names and Descriptions

Data is extracted from the PDAD 3M HDM system using the 3M Shadow database and SQL. Where a field exists as a parent/child relationship, the Parent and all children are extracted into a separate Shadow table. If the field is not a parent/child relationship field, it is extracted into the HDMA table. For more information about individual fields, see Appendix 3 (Mandatory DAD elements) and the PDAD data dictionary/mapping document.

Shadow Table	Description	Years with Data
BasicOpts	Contains data collected in the Basic Options fields.	2011/12-2014/15
BloodTransf	Contains data collected in the Blood Transfusion fields.	All years
CACSInfo	Contains grouping information for Surgical Day Care episodes using the CACS methodology for the year of service. For regrouped information using subsequent CACS methodology, see DAD5Yr table.	2006/07 to current
CareUnits	Contains data collected for records with Special Care Unit stays	All years
CIHI	Contains data used to identify each individual abstract including fiscal year, batch period, batch number and abstract number	All years
CMGInfo	Contains grouping information for inpatient episodes using the CMGPlx methodology (2001/02-2006/07)	2001/02-2006/07
CMGPLUS	Contains grouping information for inpatient episodes using the CMG+ methodology for the year of service. For regrouped information using subsequent CMG+ methodology, see DAD5Yr table.	2007/08 to current
DAD5yr	Contains regrouped information for CMG+ and CACS methodologies	All years
DPGInfo	Contains grouping information for Surgical Day Care episodes using the DPG methodology (2001-02 to 2010-11).	2001/02-2010/11

Shadow Table	Description	Years with Data
DxInfo	Contains diagnosis information	All years
ERWAIT	Contains Emergency department admission, discharge and wait times	All years
HDMA	Comparable to the Care Episode table in CDMS. Fields that are not parent/child relationships are found here.	All years
HDMM	Linking table (contains the Episode Identifier and HDMM ID)	All years
InstFromInfo	Contains information related to the Institution from which the patient was transferred to the service facility	All years
InstToInfo	Contains information related to the institution to which the patient was transferred from the service facility	All years
MBlinkInfo	Contains linking information for mothers and newborns related to the birth event	All years
MentalHealth	Contains data related to Mental Health	All years
ProjectFields	Contains data related to special projects	All years
ProviderInfo	Contains information related to providers involved in the episode of care	All years
PxInfo	Contains intervention (procedure) information	All years
ReprCare	Contains information related to reproductive care	All years
SvcXfr	Contains data collected related to service transfers	All years
Cement 1-4	Canadian Joint Replacement Registry table - Contains data related to the cement used in joint replacement/revision	2018/19 to current
Parts 1-6	Canadian Joint Replacement Registry table - Contains data related to the parts used in joint replacement/revision	2018/19 to current
Restraint	Mental Health table – contains data related the type and frequency of restraints used	2018/19 to current

Appendix 2: Grouping Information and 5 Year Regrouping Important Notes

Inpatient data is grouped using the Case Mix Group plus (CMG+). Case Mix Methodology is updated every year using data from case-costing facilities across Canada. In order to facilitate trending of data, CIHI provides the province with regrouped data for a five year period which supports comparability over that five year period.

File years will have **only 1 set** of original grouping information (found in CMGPLUS parent field) and **only 5 sets** regrouped values grouped to 5 methodology years following the file year (found in DAD5YR parent field). Once the file year has been regrouped 5 times, it will not be regrouped again. Users should exercise caution when comparing case mix information using different methodology years. Depending on the methodology used, the same abstract could be grouped to a different CMG and be assigned different values for RIW (Resource Intensity Weights) and ELOS (Expected Length of Stay).

The graphic on the next page outlines where the information is stored in the PDAD system.

Mapping of CMG+ Data in the PDAD

CMG Methodology Year	Fiscal Year of Data																					
	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	
CMG+2007	5Y	5Y	5Y	5Y	5Y	5Y	C+	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	
CMG+2008	NR	NR	5Y	5Y	5Y	5Y	5Y	C+	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	
CMG+2009	NR	NR	NR	5Y	5Y	5Y	5Y	5Y	C+	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	
CMG+2010	NR	NR	NR	NR	5Y	5Y	5Y	5Y	5Y	C+	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	
CMG+2011	NR	NR	NR	NR	NR	5Y	5Y	5Y	5Y	5Y	C+			NR	NR	NR	NR	NR	NR	NR	NR	
CMG+2012	NR	NR	NR	NR	NR	NR	5Y	5Y	5Y	5Y	5Y	C+		NR	NR	NR	NR	NR	NR	NR	NR	
CMG+2013	NR	NR	NR	NR	NR	NR	NR	5Y	5Y	5Y	5Y	5Y	C+	NR	NR	NR	NR	NR	NR	NR	NR	
CMG+2014	NR	NR	NR	NR	NR	NR	NR	NR	5Y	5Y	5Y	5Y	5Y	C+	NR	NR	NR	NR	NR	NR	NR	
CMG+2015	NR	NR	NR	NR	NR	NR	NR	NR	NR	5Y	5Y	5Y	5Y	5Y	C+	NR	NR	NR	NR	NR	NR	
CMG+2016	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	5Y	5Y	5Y	5Y	5Y	C+	NR	NR	NR	NR	NR	
CMG+2017	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	5Y	5Y	5Y	5Y	5Y	C+	NR	NR	NR	NR	
CMG+2018	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	5Y	5Y	5Y	5Y	5Y	C+	NR	NR	NR	
CMG+2019	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	5Y	5Y	5Y	5Y	5Y	C+	NR	NR	
CMG+2020	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	5Y	5Y	5Y	5Y	5Y	C+	NR	
CMG+2021	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	5Y	5Y	5Y	5Y	5Y	5Y	C+

Legend:

NR	Not in Record
C+	CMGPLUS
5Y	DAD5YEAR

Appendix 3: Facility/Board That Submitted To the DAD

Facility	Facility ID Number	Year(s) of Data PDAD	Associated RHA (as of 2005)/ Board (2001-2005)	Level of Care Submitted	Comments
General Hospital, Health Sciences Centre, includes Janeway	001	2001/02 to 2012/13	Eastern Health Authority/ Health Care Corporation of St. John's.	Acute and Surgical Day Care	
	215	2013/14 to present			
St. Clare's Mercy Hospital	003	2001/02 to 2012/13	Eastern Health Authority/ Health Care Corporation of St. John's.	Acute and Surgical Day Care	As of April 1, 2000 this facility began submitting data under the General Hospital, Health Sciences Centre
	214	2013/14 to present			As of 2013/14, began submitting under its own number
Western Memorial Regional Hospital	004	2001/02 to present	Western Health Authority/ Western Health Care Corporation	Acute and Surgical Day Care	
Notre Dame Bay Memorial Hospital	005	2001/02 to present	Central Health Authority/ Central East Health Care Institutions Board	Acute Chronic – 2001/02-2004/05	
Bonavista Peninsula Health Centre	007	2001/02 to present	Eastern Health Authority/ Peninsulas Health Care Corporation	Acute Surgical Day Care 2001/02-2016/17 Chronic 2001/02-2004/05 Medical Day Care 2001/02-2006/07	Discontinued Surgical Day Care submissions as of April 1, 2017
Bonne Bay Health Centre	008	2001/02 to present	Western Health Authority/ Western Health Care Corporation	Acute Chronic 2001/02-2004/05	
Brookfield/Bonnews Health Centre	009	2001/02 to present	Central Health Authority/ Central East	Acute	

Facility	Facility ID Number	Year(s) of Data PDAD	Associated RHA (as of 2005)/ Board (2001-2005)	Level of Care Submitted	Comments
			Health Care Institutions Board		
Calder Health Care Centre	010	2001/02 to present	Western Health Authority/ Western Health Care Corporation	Acute Chronic 2001/02- 2004/05	
Dr. Charles L. LeGrow Health Centre	012	2001/02 to present	Western Health Authority/ Western Health Care Corporation	Acute and Surgical Day Care Chronic 2001/02- 2004/05	
Fogo Island Health Centre	014	2001/02 to present	Central Health Authority/ Central East Health Care Institutions Board	Acute	
Connaigre Peninsula Health Centre	016	2001/02 to present	Central Health Authority/ Central West Health Corporation	Acute Chronic 2001/02- 2004/05	
Dr. A.A. Wilkinon Memorial Health Centre	018	2001/02 to present	Eastern Health Authority/ Avalon Health Care Institutions Board	Acute	
Placentia Health Centre	019	2001/02 to present	Eastern Health Authority/ Avalon Health Care Institutions Board	Acute	
Green Bay Community Health Centre	020	2001/02 to present	Central Health Authority/ Central West Health Corporation	Acute	
Sir Thomas Roddick Hospital	021	2001/02 to present	Western Health Authority/ Western Health Care Corporation	Acute and Surgical Day Care	
Rufus Guincharde Health Care Centre	025	2001/02 to present	Western Health Authority/ Western Health Care Corporation	Acute Chronic 2001/02- 2004/05	
Charles S. Curtis Memorial Hospital	026	2001/02 to present	Labrador-Grenfell Health Authority/ Grenfell Regional	Acute and Surgical Day Care	

Facility	Facility ID Number	Year(s) of Data PDAD	Associated RHA (as of 2005)/ Board (2001-2005)	Level of Care Submitted	Comments
			Health Services Board		
Cartwright Community Clinic	027	2001/02 to 2013/14	Labrador-Grenfell Health Authority/ Health Labrador Corporation	Acute 2001/02-2013/14	Ceased submissions as of March 31, 2014
White Bay Central Health Centre	030	2001/02 to present	Labrador-Grenfell Health Authority/ Grenfell Regional Health Services Board	Acute	
Strait of Belle Isle Health Centre	031	2001/02 to present	Labrador-Grenfell Health Authority/ Grenfell Regional Health Services Board	Acute	
Labrador South Health Centre	032	2001/02 to present	Labrador-Grenfell Health Authority/ Grenfell Regional Health Services Board	Acute	
Nain Community Clinic	035	2001/02 to 2012/13	Labrador-Grenfell Health Authority/ Health Labrador Corporation	Acute 2001/02-2013/14	Ceased submissions as of March 31, 2014
Central Newfoundland Regional Health Centre	038	2001/02 to present	Central Health Authority/ Central West Health Corporation	Acute and Surgical Day Care	
A.M. Guy Memorial Health Centre	039	2001/02 to present	Central Health Authority/ Central West Health Corporation	Acute	
Hopedale Community Clinic	045	2001/02 to 2012/13	Labrador-Grenfell Health Authority/ Health Labrador Corporation	Acute 2001/02-2013/14	Ceased submissions as of March 31, 2014
Makkovik Community Clinic	047	2001/02 to 2012/13	Labrador-Grenfell Health Authority/ Health Labrador Corporation	Acute 2001/02-2013/14	Ceased submissions as of March 31, 2014
James Paton Memorial Hospital	049	2001/02 to present	Central Health Authority/ Central East	Acute and Surgical Day Care	

Facility	Facility ID Number	Year(s) of Data PDAD	Associated RHA (as of 2005)/ Board (2001-2005)	Level of Care Submitted	Comments
			Health Care Institutions Board		
Baie Verte Peninsula Health Centre	050	2001/02 to present	Central Health Authority/ Central West Health Corporation	Acute Chronic 2001/02-2014/05	
Dr. Walter Templeman Community Health Centre	053	2001/02 to present	Eastern Health Authority/ Health Care Corporation of St. John's.	Acute	
Captain William Jackman Memorial Hospital	055	2001/02 to 2014/15	Labrador-Grenfell Health Authority/ Health Labrador Corporation	Acute and Surgical Day Care 2001/02-2014/15 Chronic 2001/02-2004/05	Facility closed; replaced by Labrador West Health Centre (217) Ceased submissions March 31, 2015
Labrador West Health Centre	217	2015/16 to present	Labrador-Grenfell Health Authority	Acute and Surgical Day Care	Replaced Captain William Jackman (055) Began submissions April 1, 2015
Janeway Child Health Centre	056	2001/02 – 2005/06	Eastern Health Authority/ Health Care Corporation of St. John's.	Acute and Surgical Day Care	As of April 1, 2006, this facility began submitting data under the General Hospital, Health Sciences Centre (under 001 for 2006/07 to 2012/13, for 2013/14 onwards submits under 215).
	001	2006/07-2012/13			
	215	2013/14 to present			
Labrador Health Centre	059	2001/02 to present	Labrador-Grenfell Health Authority/ Health Labrador Corporation	Acute and Surgical Day Care	
Carbonear General Hospital	060	2001/02 to present	Eastern Health Authority/ Avalon Health Care Institutions Board	Acute and Surgical Day Care	

Facility	Facility ID Number	Year(s) of Data PDAD	Associated RHA (as of 2005)/ Board (2001-2005)	Level of Care Submitted	Comments
Waterford Hospital	061	2001/02 to 2012/13	Eastern Health Authority/ Health Care Corporation of St. John's.	Acute and Surgical Day Care Chronic	As of April 1, 2000 this facility began submitting data under the General Hospital, Health Sciences Centre
	216	2013/14 to present			As of 2013/14, began submitting under its own number
Dr. G.B. Cross Memorial Hospital	064	2001/02 to present	Eastern Health Authority/ Peninsulas Health Care Corporation	Acute and Surgical Day Care Chronic 2001/02-2004/05 Medical Day Care 2001/02-2006/07	
Burin Peninsula Health Care Centre	065	2001/02 to present	Eastern Health Authority/ Peninsulas Health Care Corporation	Acute and Surgical Day Care Medical Day Care 2001/02-2006/07	
Dr. L.A. Miller Centre	069	2001/02 to 2005/06	Eastern Health Authority/ Health Care Corporation of St. John's.	Acute 2001/02-2010/11 Chronic 2001/02-2004/05	
Western Long Term Care	344	2020/21 to present	Western Health Authority	Acute (Palliative)	Began submitting Acute Palliative cases 2020/21

Appendix 4: Known PDAD Facts

<p>This information is listed in sections: first applicable to all facilities/regions followed by facility/region specific. Both sections identify change/impact in alphabetic order. This appendix contains information that may impact research outcome; it is recommended that this section be thoroughly reviewed.</p>			
Change/Impact	Region/Facility Impacted	Fiscal Year	Comments
All Sites/Region Impacted By Change			
Acronym for Newfoundland and Labrador	All	All	Over time the acronym for Newfoundland and Labrador changed in the DAD; this impacted the methodology of uniquely identifying patients. The PDAD files were updated when the last change occurred to uniquely identify Newfoundland and Labrador; Acronyms used were NFLD, 01, NF and NL. NL was the most recent change and all PDAD files now identify our province as NL.
Age Calculation	All	All	At CIHI the age is calculated based upon admission date not discharge date.
CMG and DPG Regrouped Data 2001-02	All	2001-02	All 2001-02 data was regrouped by CIHI as requested by the Department of Health and Community Service (required for a review of Western & Grenfell data). There are 2004 files that are NOT included in this CMG+ regrouped data. The following facilities have files omitted from 2001-02 data; Dr. .B. Cross Memorial Hospital, Burin Peninsula Health Care Center, Bonavista Health Centre and Baie Verte Peninsula Health Centre These four facilities failed to meet the year-end deadline for 2001-02.
Linkage of mom & Baby	All	All	<p>From 2001-02 to 2005-06 linkage was by register (admit) number.</p> <p>From 2001 to 2006 there appears to be inconsistencies in the linkage of moms and babes. Therefore caution should be used when linking moms and babes in PDAD from 2001-2006.</p>

This information is listed in sections: first applicable to all facilities/regions followed by facility/region specific. Both sections identify change/impact in alphabetic order. **This appendix contains information that may impact research outcome; it is recommended that this section be thoroughly reviewed.**

Change/Impact	Region/Facility Impacted	Fiscal Year	Comments
			<p>From 2006-07 to present linkage is by chart number.</p> <p>From April 1, 2001 to March 31, 2005 all infants born at Women’s Health Centre were admitted to Janeway thus breaking the link between mother (admitted to HSC) and baby (admitted to Janeway). The Janeway began reporting newborns under facility number to HSC (001) as of April 1, 2005.</p> <p>For a number of years, HCCSJ and later Eastern Health has used the MCP as a chart number, though some effort has been made to change this on a go-forward basis. CIHI only accepts 10 digits for the chart number data element, so the chart number for many records is the truncated MCP (the last two digits are truncated).</p>
Project 340	All	2012	<p>In 2009, the Canadian Stroke Network, in conjunction with the Canadian Institute for Health Information (CIHI), created an opportunity for all Canadian acute care facilities to collect vital stroke information that is not captured routinely in any other databases.</p> <p>Western Regional Health Authority began collection of Project 340 Stroke as of April 1, 2009. All other health regions began collection on April 1, 2012 and it became mandatory to complete Project 340 Stroke in Newfoundland and Labrador.</p>
Project 350	All	2001-2008	Project 350 Allied Health, collection of allied health services, data was discontinued on September 18, 2008. The overall data in this field was not consistently coded and the

<p>This information is listed in sections: first applicable to all facilities/regions followed by facility/region specific. Both sections identify change/impact in alphabetic order. This appendix contains information that may impact research outcome; it is recommended that this section be thoroughly reviewed.</p>			
Change/Impact	Region/Facility Impacted	Fiscal Year	Comments
			information is not considered reliable. It is not advised to use this data.
Project 497 (See also note under Other about Diabetes)	All	2001-2003	<p>Project 497 Chronic Conditions, was introduced in 1999. It required NL facilities to collect data in a Special Project field within the discharge abstract to indicate the presence of documented chronic conditions in the health record of individuals discharged from hospital.</p> <p>2001 onward used ICD-10 codes for</p> <ul style="list-style-type: none"> • COPD • Irritable Bowel Syndrome (Crohn's Ileitis & Colitis) • Arthritis (all types) • Hypertensive Disease • Ischemic Heart Disease • PVD • Chronic Renal Failure • Schizophrenia <p>NOTE: Diabetes was inadvertently left off the 2001 list however beginning January 1, 2003 hospitals were mandated to code all diabetes regardless of the diagnosis typing. Diabetes was listed in Project 497 again in 2003.</p> <p>Effective April 1, 2010 Project 497- Chronic Conditions is no longer mandatory. It is a Regional/Facility decision to collect this data. See page 12.16-1 as per 2010-11 in the Provincial Section of DAD.</p>
Diabetes	All	2001-02 to 2008-09	<p>In 2001 & 2003 ICD-10 CA diabetes codes were in a table format and there was a 6th digit (0-4 & 9) to indicate the level of control.</p> <p>0 = Adequately controlled with diet or oral agents</p>

This information is listed in sections: first applicable to all facilities/regions followed by facility/region specific. Both sections identify change/impact in alphabetic order. **This appendix contains information that may impact research outcome; it is recommended that this section be thoroughly reviewed.**

Change/Impact	Region/Facility Impacted	Fiscal Year	Comments
<p>ICD-10-CA coding Impact</p> <p>Project 497 Impact</p>			<p>1 = Adequately controlled with insulin 2 = Inadequately controlled with diet or oral agents (and insulin not used to stabilize) 3 = Inadequately controlled with diet or oral agents but adequately controlled with insulin 4 = Inadequately controlled with insulin 9 = Level of control unspecified</p> <p>In 2006(07) diabetic codes were not in a table format and no longer have a sixth digit identifying the level of control. There were also a number of additional codes added to the classification for specificity in 2006(07) as well as the 2009 classification.</p> <p>In December 2002 it was identified that as of April 1, 2001, diabetes mellitus was inadvertently omitted from Project 497. Several facilities recognized the omission and began coding diabetes mellitus as a diagnosis type 3 on the DAD abstract using ICD-10-CA classification. In December 2002, the Centre mandated that all acute care patients who had a diagnosis of diabetes mellitus as a diagnosis type 3 be included on the DAD abstract until it was reinstated as a chronic condition in Project 497.</p> <p>As of April 1, 2003 diabetes mellitus was reinstated in Project 497 and was not required to be coded on the DAD abstract as a diagnosis type 3. (see mandate binder, memo dated, April 8, 2003.)</p> <p>As of April 1, 2006, CIHI mandated that all acute and surgical day care patients who had a diagnosis of diabetes mellitus regardless of the diagnosis typing be captured on the DAD abstract. All facilities in the province of Newfoundland and Labrador adhere to this</p>

<p>This information is listed in sections: first applicable to all facilities/regions followed by facility/region specific. Both sections identify change/impact in alphabetic order. This appendix contains information that may impact research outcome; it is recommended that this section be thoroughly reviewed.</p>			
Change/Impact	Region/Facility Impacted	Fiscal Year	Comments
			national mandate. Many facilities continued to capture diabetes mellitus in Project 497 and as a Diagnosis Type 3 on the DAD in 2003, caution should be taken not to double count Diabetes cases.
ER Data	All	2001-02	Please use caution when using ER data for earlier years of ICD-10-CA data. It has been identified that this data is not reliable.
Residence Codes Community Table	All	2009-2010	<p>Effective April 1, 2009.</p> <p>Since 2002 Natuashish (when it became a community) has used Davis Inlet residence code. This was done based upon the understanding that all residents of Davis Inlet had moved to Natuashish. After reviewing the Municipal Affairs lists to update the 2008 community table in PDAD it was recognized that Davis Inlet is still inhabited. Therefore a residence code was assigned to both communities.</p> <ul style="list-style-type: none"> • 1345 is Davis Inlet residence code • 6035 is Natuashish residence code
Rhogam & WinRho	All	2001 to present	As of April 1, 2001 Rhogam and WinRho injections were coded as interventions and NOT included in the Blood Product project. Prior to 2001 this was coded as “other” in the blood product project.
Gestational Age 99 – Not Available	All	2010-2011	The 2010 DAD (page 6.18, Group 18 Field 06) indicates the valid value of Gestational Age 99 (not available). The value 99 should not be included in any calculations. Users are to interpret the value “Y” in PDAD

<p>This information is listed in sections: first applicable to all facilities/regions followed by facility/region specific. Both sections identify change/impact in alphabetic order. This appendix contains information that may impact research outcome; it is recommended that this section be thoroughly reviewed.</p>						
Change/Impact	Region/Facility Impacted	Fiscal Year	Comments			
			(GEST_WK_DLV_OTH_I) as Gestational Age not available.			
Specific Site/Region Impacted By Change						
<p>Basic Option 17 – Site Code</p> <p>Also known as Discharge Site for Eastern Health (City Hospitals)</p>	Eastern and Western	2005-06	<p>In 2005 the former HCSSJ (Waterford, St. Clare’s, LA Miller, Dr. Walter Templeman and Health Sciences Centre (HSC)) began using Basic Option 17, to flag the discharge site. Discharge site was identified by alpha characters. Please note: information recorded for 2005/06 is inconsistent. On October 01, 2006 the site identification was changed from alpha to numeric characters. Only facilities reporting under 001 completed Basic Option 17. (Exception, Dr. Walter Templeton Hospital continues to report discharge site in Basic Option 17 using facility number (053).</p> <p>Janeway also completed discharge site although they continued to report under 056 until March 31, 2006.</p> <p>Western Memorial Regional Hospital also used Basic Option 17 for internal purposes. This was transmitted to CIHI therefore causing a conflict in data values in the Basic Option 17 field. Western Memorial Regional Hospital stopped reporting Basic Option 17 to CIHI as of April 1, 2006.</p> <p>The table below identifies the applicable values in PDAD for facility 001, Basic Option 17.</p> <table border="1"> <tr> <td>SITE</td> <td>ALPHA SITE</td> <td>NUMERIC SITE CODE</td> </tr> </table>	SITE	ALPHA SITE	NUMERIC SITE CODE
SITE	ALPHA SITE	NUMERIC SITE CODE				

This information is listed in sections: first applicable to all facilities/regions followed by facility/region specific. Both sections identify change/impact in alphabetic order. **This appendix contains information that may impact research outcome; it is recommended that this section be thoroughly reviewed.**

Change/Impact	Region/Facility Impacted	Fiscal Year	Comments		
				CODE (2005-06)	(October 01, 2006-2012/13)
			Health Sciences Centre	HS	01
			St. Clare's Mercy Hospital	SC	02
			Waterford Hospital	WH	03
			Janeway Child Health Centre	JC	04
			L.A. Miller Centre	MC	05
			Dr. Walter Templeman Hospital (reports under 053)	WT	06
Chronic Care And Mental Health Chronic Care	Waterford, LeGrow and Sunshine Manor	2005-2006	<p>As of April 1, 2005 only Waterford patients, Dr. Charles LeGrow and Sunshine Manor continued to report chronic care (level of care 3, aka long-term care). All other facilities that previously reported chronic care discontinued reporting as of April 1, 2005.</p> <p>Sunshine Manor and Dr. Charles LeGrow discontinued reporting chronic care as of April 1, 2006.</p> <p>As of April 1, 2006 only the Waterford Hospital report chronic care (level 3).</p> <p>In 2006 it was discovered that all chronic mental health cases from the Waterford, coded to facility 001 were changed to indicate that the</p>		

This information is listed in sections: first applicable to all facilities/regions followed by facility/region specific. Both sections identify change/impact in alphabetic order. **This appendix contains information that may impact research outcome; it is recommended that this section be thoroughly reviewed.**

Change/Impact	Region/Facility Impacted	Fiscal Year	Comments
			<p>reporting facility was 069 (L.A. Miller Centre) This was during a period when a high number of acute care beds were being used for chronic care. There is no documentation to state why all chronic care from facility 001 was changed to facility 069. This resulted in mental health chronic care patients being categorized with acute care patients receiving chronic care. To investigate and determine a course of action to correct these issues the Senior Systems Consultant-Healthcare at OCIO along with NLCHI staff will review the data both pre and post PDAD import. This document will be updated when the investigation is completed. As of 2005/06 Waterford chronic care is identified.</p> <p>Facilities that submitted mental health indicators to CIHI are identified by having the psych flag turned on at CIHI. The data submitted from these facilities undergo additional data quality testing to include mental health fields. It is an individual facility decision to submit mental health data to CIHI. There are no predetermining factors required to submit this data.</p>
	PHCC	2001-02	<p>The former PHCC did not meet the CIHI submission deadline for 2001/02. The late submission of this data was imported into PDAD. (approximately 3,400 records) It was discovered that some of the 3,400 were duplicates entries because PHCC sent the same records to CIHI and to NLCHI. There were approximately 1,400 duplicates identified and removed from PDAD. Because these records were not easily identified there is a possibility that some abstracts are duplicates and might</p>

This information is listed in sections: first applicable to all facilities/regions followed by facility/region specific. Both sections identify change/impact in alphabetic order. **This appendix contains information that may impact research outcome; it is recommended that this section be thoroughly reviewed.**

Change/Impact	Region/Facility Impacted	Fiscal Year	Comments
			remain in PDAD. 2004 records from 2001/02 were confirmed and are flagged to indicate they were received directly from the facility.
Newborns - 1 day stay	HCCSJ	2003-04	For newborns who have 1 day LOS and use both patient services 54 (newborn) and 97 (neonatology). The standards state that only one patient service can be used for 1 day stay. It was agreed in consultation with CIHI that patient service 97 would be used in this situation. The rationale being that this service uses more expensive resources than normal newborn.
OOH Interventions HCCSJ	HCCSJ	2001-02	Out of Hospital interventions (OOH) for HCCSJ are not recorded for facilities using 001 (e.g. patient from St. Clare's went to the HSC for intervention and returned to St. Clare's, same day) this intervention is captured as an inpatient intervention on the discharge abstract.
Operative Flag	All	2009-2011	The operative flag is incorrect for 2009-10 and 2010-11.
Medical Day Care	PHCC	1995-96 to 2006-07	From 1995-96 to 2006-07, the former PHCC captured medical day care (type 4). No other facilities collected medical day care.
Patient Service	Grenfell	2004-05	Grenfell stopped using the generic patient service code of 98 as of April 1, 2004. On April 1, 2004 they began using specific patient service codes. Grenfell used patient service 98 from April 1, 2001 to March 31, 2004.
Chart number	HCCSJ/Eastern Health	2001-02 to current	For a number of years, HCCSJ and later Eastern Health has used the MCP as a chart number, though some effort has been made to change this on a go-forward basis. CIHI only accepts 10 digits for the chart number data element, so

This information is listed in sections: first applicable to all facilities/regions followed by facility/region specific. Both sections identify change/impact in alphabetic order. **This appendix contains information that may impact research outcome; it is recommended that this section be thoroughly reviewed.**

Change/Impact	Region/Facility Impacted	Fiscal Year	Comments
			the chart number for many records is the truncated MCP (the last two digits are truncated). The Chart number is removed for the de-identified file; however, anyone using the identified file should exercise extreme caution to not inadvertently release the chart number.
Site Specific Reporting Changes	HCCSJ	2000-2001	Waterford (061), HSC (001), St. Clare's (003) and Grace (002) site specific numbers were merged and began reporting as one entity using 001 as of April 1, 2000. April 1, 2000, Health Sciences Centre (001), St. Clare's Mercy Hospital (003), Grace General Hospital (002) and Waterford Hospital (061) consolidated facility numbers and began submitting to CIHI under facility 0001, 1001 or 3001, depending upon the level of care.
Site Specific Reporting Changes	Janeway		The Janeway discontinued the use of 0056 and 1056 on April 1, 2006 and began submitting under facility number 0001 and 1001. The Janeway began reporting newborns under facility number to 001 as of April 1, 2005.
Site Specific Reporting Changes	Janeway		April 1, 2006, Janeway Child Health Centre discontinued using facility number 056 and began submitting to CIHI using facility number 001
Site Specific Reporting Changes	Miller Centre	2004-2005	March 31, 2005 all DVA (Department of Veterans Affairs) (L.A. Miller Centre), chronic care coding, was discontinued, no longer submitted to CIHI.

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Change/Impact	Region/Facility Impacted	Fiscal Year	Comments
Site Specific Reporting Changes	Miller Centre		For facility 069 (LA Miller Center) in 2005-06 CIHI did not permit the Miller Center to submit using level of care 3 (chronic care/long term) therefore all submissions have the level of care 0 (acute care). This is only for this fiscal year. Therefore the readmission code for these is blank, this was necessary to prevent fatal errors from CIHI.
Site Specific Reporting Changes	Miller Centre		March 31, 2006 L.A. Miller Center discontinued using 0069 for Rehab submission. Rehab abstracting began submitting under National Rehabilitation System (NRS).
Site Specific Reporting Changes	Miller Centre		<p>There were lengthy discussions within Eastern Health with the Medical Program about Palliative Care Unit and how the beds are used and the treatment given. The consensus was that the Palliative Care Unit as it stands now is not an acute care unit but rather a hospice. There is no active treatment given, it is strictly comfort care and pain management.</p> <p>Effective April 1, 2008 the Palliative Care Unit and Comfort Care Units at the Miller Centre were no longer considered part of the acute care facility. Patients transferred to these units are discharged from the acute care sites and readmitted to palliative care/comfort care. The palliative care/comfort care admissions are no longer submitted to CIHI.</p>
Site Specific Reporting Changes	St. Clare's & Miller Centre		September 2002, palliative care moved from St. Clare's, which was submitting under facility number 001, to L.A. Miller Center and started submitting to CIHI under facility number 069.

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Change/Impact	Region/Facility Impacted	Fiscal Year	Comments
			April 1, 2005 the submitting number for comfort care (patient service 58) at L.A. Miller Centre was changed to 001 from 069.
Site Specific Reporting Changes	General Hospital, Health Sciences Centre, St. Clare's Mercy Hospital, and Waterford Hospital	2013-14	As of April 1, 2013, General Hospital, Health Sciences Centre, St. Clare's, and Waterford Hospital no longer report as a single facility (001) and report as 3 separate facilities (Janeway remains reporting under General Hospital, Health Sciences Centre. General Hospital, Health Sciences Centre - 215 St. Clare's Mercy Hospital - 214 Waterford Hospital - 216
Site Specific Reporting Changes	Cartwright Community Clinic (027), Nain Community Clinic (035), Hopedale Community Clinic (045), Makkovik Community Clinic (047)	2014-15	As of April 1, 2014, these four Community Clinics in Labrador no longer submit to DAD.
Site Specific Reporting Changes	Captain William Jackman Memorial Hospital (055) & Labrador West Health Centre (217)	2015-16	Captain William Jackman Memorial Hospital closed and ceased submission to DAD as of March 31, 2015. Labrador West Health Centre opened and began submission to DAD as of April 1, 2015.
Surgical Day Care	Western & Central		Western Health started coding scopes (gastroscopy and sigmoid/colonoscopy) on October 1, 2002

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Change/Impact	Region/Facility Impacted	Fiscal Year	Comments
			<p>Central Newfoundland Regional Hospital started coding scopes (gastroscopy and sigmoid/colonoscopy) in 2002.</p> <p>James Paton started coding scopes (gastroscopy and sigmoid/colonoscopy) in November 2005.</p>
Facility Name Change	Paddon Home	2011-12	Paddon Home has kept the same number but shows as Long Term Care Happy Valley-Goose Bay in the 2011-2012 Provincial DAD.
Missing Newborn Abstracts	Labrador		Through the editing process of linkage of mom & baby there have been a minimum number of newborns identified that did not have an abstract submitted to CIHI. After consultation with the facility a paper abstract was submitted to the Centre and entered manually into the database.
Surgical Day Care	Eastern	2011-12	<p>Effective Fiscal 2011-2012, the Comprehensive Ambulatory Classifications System (CACS) grouping methodology was redeveloped and is used to group DAD day surgery data. The new CACS grouping methodology uses the investigative technology (diagnostic imaging) interventions found on the day surgery abstract to adjust the RIW. Therefore, it is mandatory to code any diagnostic imaging intervention (CT, MRI, nuclear medicine, X-ray, ultrasound, etcetera) performed on a day surgery case.</p> <p>For Fiscal 2011-2012, Eastern Health Region was not compliant with the DAD standard.</p>
Basic Options – Smoking Project	Labrador/Grenfell	2011-12	Labrador/Grenfell facilities will no longer collect data for the Smoking Project as of 2011-12 abstracts. To avoid triggering errors HIMs will complete Basic Option 1 with the valid value of U for unknown. This practice will remain in place until 2013/14 when CIH will remove the

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Change/Impact	Region/Facility Impacted	Fiscal Year	Comments
			edits. It should be noted that coders continued to complete this field with values other than U until the end of 2013-14.
Provider Number	Central	2011-12	During the 2011-12 PDAD editing process it was identified that in Central's 3M system the number for Dr. Nazir Fayez Barakji was 4790 however the correct number in the provider database is 4837 . The number 4790 belongs to Dr. Teri Lynn Stuckless. They confirmed that they have now corrected the number for Dr. Barakji.
New Facility Name	Western	2011-12	Dr. J.I. O'Connell Centre and Interfaith Home for Senior Citizens have closed and that the new facility is named Corner Brook Long Term Care and the Centre has assigned it Institution #206 and this is reflected in the Provincial DAD for 2011-2012
Basic Options	All regions	2014-15	As of April 1, 2015, no regions submit Basic Options fields.
Reduction of services	All regions	March 2020 – March 2022	Due to the COVID-19 pandemic, there was a reduction of non-essential services, resulting in lower volumes of both inpatient and day surgery visits.

Appendix 5: Glossary

Alternative Level of Care (ALC)

When a patient is occupying a bed in a facility and does not require the intensity of resources provided in that care setting (Acute/Complex Continuing Care [Chronic], Mental Health or Rehabilitation), the patient must be designated Alternate Level of Care (ALC) at that time by a physician or his/her delegate. The authorized designate may be a long term care assessor, patient care manager, discharge planner or care team member. (The decision to assign ALC status is not a Health Information Management responsibility).

Note: Prior to Fiscal 2010-2011, the definition of ALC in the DAD applied to acute care only, to facilitate acute expected length of stay calculations.

Canadian Classification of Health Interventions (CCI)

This is a national standard for classifying health care procedures. CCI is the companion classification system to ICD-10-CA.

Canadian Classification of Diagnostic, Therapeutic, and Surgical Procedures (CCP)

This is the national standard for classifying health care procedures used in PDAD up to April 1, 2001.

Case Mix Groups Plus CMG+

The Case Mix Groups+ (CMG+) methodology is designed to aggregate acute care in-patients with similar clinical and resource-utilization characteristics. The CMG+ methodology was introduced in 2007. CMG+ was designed to take advantage of the increased clinical specificity of ICD-10-CA and CCI. This methodology, developed using multiple years of acute care inpatient activity and cost records, introduces and enhances several grouping factors to improve the ability to clinically group inpatients and to define length of stay and resource use indicators.

ICD-10-CA diagnosis codes are used to broadly categorize patients into major clinical categories (MCC). These broad categories are based generally on the most responsible diagnosis code (MRDx). The MCC is divided into two partitions: intervention and diagnosis. If a case is assigned to the diagnosis partition of an MCC, a list of diagnosis codes is used to assign the CMG cell. If a case is assigned to the intervention partition of an MCC, a hierarchical list of intervention codes is used to assign the CMG cell.

The CMG+ methodology further refines CMG with components known as factors to reflect additional conditions that influence a patient's overall medical condition and resource consumption. These factors, known as the Five Factor Methodology, applied across most CMG include:

- Age Group

- Comorbidity Level
- Flagged Interventions
- Intervention Events
- Out-of-Hospital Intervention

Together, these factors are applied to the acute care inpatient cases to improve estimates of resource indicators (RIW and ELOS).

Case Mix Groups Plex (CMG/Plx)

Case Mix Groups (CMGs) were introduced in 1973, forming the patient classification system for bed utilization. They group similar patients together from a clinical as well as a resource use perspective. Historically, CMGs split on age and/or complications or comorbidity. The patient's MRDx is used to assign the case to one of the 24 Major Clinical Categories (MCC). Within each MCC, based on the presence or absence of an operative procedure, the case is directed towards a surgical or medical hierarchy flowchart.

In 1997, CIHI introduced a complexity overlay called "Plx" to its inpatient case-mix methodology. The complexity overlay identifies diagnoses, over and above the MRDx used for CMG assignment, for which prolonged length of stay and more costly treatment might reasonably be expected. Complexity is applied to hospital inpatient cases with one or more chronic disease conditions outside of the primary focus of the acute care episode, cases with multi-organ failure, and cases with iatrogenic or other complications. Complexity is not applied where it does not demonstrate improved homogeneity in LOS or total resource use. Complexity is specific to the medical or surgical MCC partitions.

CIHI

The Canadian Institute for Health Information (CIHI) is an independent, not-for-profit organization that provides essential data and analysis on Canada's health system and the health of Canadians.

DAD Abstracting Manual

The Discharge Abstract Database (DAD) contains data on hospital discharges across Canada. The DAD manual provides specifications and edits related to each element on the abstract.

Day Procedure Groups (DPG)

Day Procedure Groups is a national classification system for ambulatory hospital patients that focus on the area of day surgery. Patients are assigned to categories according to the principal or most resource-intensive intervention recorded on the patient abstract.

Patients assigned to the same DPG group represent a homogeneous cluster with similar clinical episodes and requiring similar resources. The DPG grouping methodology continues to be based on the CCI and is the result of an extensive review and revision process using Canadian case-cost

data. Each DPG group is assigned a DPG RIW value, which is used to standardize the expression of hospital day surgery volumes, recognizing that not all day surgery patients require the same health care resources. The volume of day surgery cases is then expressed as total day surgery weighted cases and these weighted cases can be directly compared to the inpatient weighted cases and CACS weighted cases.

Diagnosis Typing

Diagnosis Typing applies to all data submitted to the Discharge Abstract Database (DAD). The assignment of a diagnosis type to a condition is meant to signify the impact that the condition had on the patient's care as evidenced in the physician documentation. The following list the various diagnosis types:

- **Most responsible diagnosis (Type M)**

Diagnosis type (M) is the one diagnosis or condition that can be described as being most responsible for the patient's stay in hospital. If there is more than one such condition, the one held most responsible for the greatest portion of the length of stay or greatest use of resources (i.e. operating room time, investigative technology, etc.) is selected

- **Comorbidity diagnoses (Types 1 and 2)**

A diagnosis type (1) is a condition that existed prior to admission, has been assigned an ICD-10-CA code, and satisfies the requirements for determining comorbidity.

A diagnosis type (2) is a condition that arises post-admission, has been assigned an ICD-10-CA code and satisfies the requirements for determining comorbidity.

If a post-admit comorbidity qualifies as the MRDx, it must be recorded as both the MRDx and as a diagnosis type (2).

- **Secondary diagnoses (Type 3)**

A diagnosis type (3) is a secondary diagnosis or condition for which a patient may or may not have received treatment, has been assigned an ICD-10-CA code and does not satisfy the requirements for determining comorbidity. Diagnoses that are **only listed** on the Front Sheet, Discharge Summary, Death Certificate, History and Physical or Pre-operative Anesthetic Consults qualify as a diagnosis type (3)—secondary diagnosis. If there is physician documentation elsewhere in the chart that the condition affected the treatment received or required treatment beyond maintenance of the preexisting condition or increased the length of stay (LOS) by at least 24 hours it then must be determined if it is a diagnosis type (1) or type (2) comorbidity.

- **Proxy most responsible diagnosis (Type 6)**

A diagnosis type (6) is assigned to a designated asterisk code in a dagger/asterisk convention when the condition it represents fulfills the requirements stated in the

definition for diagnosis type (M)—most responsible diagnosis (MRDx). In morbidity coding, asterisk codes are manifestations of an underlying condition and according to the World Health Organization (WHO) rules, must be sequenced following the code for the underlying cause.

The underlying cause codes are identified with a dagger symbol (†) in the ICD-10-CA classification. Diagnosis type (6) is used on the **second line** of the diagnosis field of the abstract to indicate that the manifestation is the condition most responsible for the patient's stay in hospital. When the underlying condition meets the criteria for MRDx, or when it would be difficult to delineate whether it is the underlying condition or the manifestation that meets the criteria for MRDx, the asterisk code is assigned diagnosis type (3).

- **Service transfer diagnoses (Types W, X and Y)**

An ICD-10-CA code associated with the first/second/third service transfer.

- **External cause of injury codes (Type 9)**

A diagnosis type (9) is an external cause of injury code (Chapter XX—*External causes of morbidity and mortality*), place of occurrence code (U98.—*Place of occurrence*) or activity code (U99.—*Activity*). Chapter XX codes are mandatory for use with codes in the range S00–T98 *Injury, poisoning and certain other consequences of external causes*. Category U98.—*Place of occurrence* is mandatory with codes in the range W00–Y34, with the exception of Y06 and Y07, and Category U99.—*Activity* is optional.

- **Diagnoses restricted to newborn abstracts only (Type 0)**

Diagnosis Type (0) is restricted to newborn codes only (admit category N).

Diagnosis Prefix 5 and 6

Prefixes 5 and 6 describe the chronological relationship between a diagnosis type (2) (post-admit comorbidity) and the first qualifying intervention occurring in

- The main operating room (OR) at the reporting facility; or
- The cardiac catheterization room at the reporting facility; or
- Another facility (out of hospital [OOH]) for selected cardiac interventions:
 - 3.IP.10.^Xray, heart with coronary arteries;
 - 1.IJ.50.^Dilation, coronary arteries; and/or
 - 1.IJ.57.^Extraction, coronary arteries.

Expected Length of Stay (ELOS)

Expected length of stay is calculated as average acute days for “typical” acute care inpatients. ELOS will depend on CMG assignment as well as complexity levels, and age, where appropriate. Typical cases exclude deaths, transfers, voluntary sign-outs and cases where the actual length of stay is greater than the “trim point” established by CIHI.

International Classification of Diseases and Related Health Problems, Tenth Revision, Canada (ICD-10-CA).

This system consists of codes to classify diseases and health problems.

International Classification of Diseases, Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death, (ICD-9)

This is the national coding classification system used in PDAD up to April 1, 2001.

Length of Stay (LOS)

Length of stay, for inpatient abstracts, is the difference, in days, between the Admission Date and Discharge Date. If the difference is 0 (Admission Date equals Discharge Date), the calculated LOS is 1.

Length of stay, for same-day surgery abstracts, is the difference, in hours, between the Admission Time and Discharge Time.

Office of the Chief Information Officer (OCIO)

The OCIO provides Information Technology and Information Management capability aligned to support the business of government and the citizens of Newfoundland and Labrador.

Reabstracting

Coding of health records previously coded and submitted to CIHI. The reabstracting is completed by a Health Information Management professional not associated with the originating facility.