DAD

Discharge Abstract Database

Open-Year Data Quality Test Specifications

2023–2024

Canadian Institute for Health Information
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Introduction

As part of the Canadian Institute for Health Information's (CIHI's) commitment to quality data, the Discharge Abstract Database (DAD) is routinely analyzed for data quality issues during the submission year and after database closure. Suspect findings are communicated back to the submitting facilities for investigation and correction while the database is still open for submission.

Purpose

This document was created to

- Accompany the Open-Year Data Quality (OYDQ) reports flagging suspect data quality issues; and
- Help DAD clients create their own data quality audits to identify abstracts with suspected data quality issues and to submit corrections in a timely manner.

This document lists the OYDQ tests performed on the DAD, along with their rationale, rule, selection criteria, the data elements used in the analysis and, for some tests, one correct example to demonstrate a correct case and the references. It is important to note that the correct example does not cover all possible correct examples. Each test is indexed by a reference number and this number is used for all communication with clients.

The quarterly DAD OYDQ reports are made available to facilities and/or Provincial/Territorial Ministries of Health via the DAD and NACRS Applications web page. Automated email notifications are sent to clients when these reports are posted. Click on the following links: Operational Reports, DAD and then on Open Year Data Quality Reports.

Facilities are asked to review errors and to resubmit the corrected abstracts, where applicable. Each OYDQ detailed report references the DQ test number and name along with the DAD abstract identification data elements, such as Chart Number, Fiscal Year, Fiscal Period, Batch Number, Abstract Number and Discharge Date. The abstract identification information helps facilities link the abstracts with suspect data quality issues to the matching abstracts in their systems. A summary report is also provided. It includes the number of abstracts with errors, the number of total eligible abstracts and the percent error for each applicable OYDQ test. Provincial and national error percentages are also shown as comparison.

Note: The same abstract may be identified as having more than one data quality issue, therefore it may appear in several tests. For example, an abstract may be identified in the OYDQ test Incorrect Infant Status of Singleton Within Multiparous Delivery Episode (D1002-32) and again in OYDQ test Potential Extra Abstracts (D0103-18).

Updates

The DAD Open-Year Data Quality Test Specifications document is updated every fiscal quarter with new, or modified OYDQ tests. An OYDQ test may be deleted if new edits are created or if the data quality issue is no longer relevant. An OYDQ test may also be modified to reflect enhancements to the data collection instructions in the DAD Abstracting Manual, the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Canada (ICD-10-CA), the Canadian Classification of Health Interventions (CCI) and/or to align with the most recent version of the Canadian Coding Standards for ICD-10-CA and CCI.

Please submit questions to CIHI at cad@cihi.ca.

Open-year data quality tests: Summary and rationale

The following table provides a brief summary of the DAD OYDQ tests for the current fiscal year. In the rationale column, the table also highlights a number of key impacts of correcting these DQ issues. Each test is described in greater details in the following section.

OYDQ test number	OYDQ test title	Short description	Rationale
D0103-18	Potential Extra Abstracts	One abstract recorded multiple times with the same values in several key fields used to match abstracts	Recording one discharge multiple times impacts both the Resource Intensity Weight assignment and the rate of over-coverage.
D0112-23	Incomplete Linkage of Mothers and Babies	Incorrect Chart Number or Maternal/Newborn Chart Number recorded in mothers' or babies' abstracts	Linking maternal and newborn abstracts are critical in the measurement of maternal/newborn health outcomes. The Maternal/Newborn Chart Number is the only data element used to link mothers and their babies.
D0301-117	Mother's Health Care Number Recorded on Out-of-Province Newborn's Abstract	When available, the provincial/territorial health care number (HCN) assigned to the newborn should be recorded.	High percentages of newborn abstracts with the mother's HCN recorded as HCN diminish the ability to link records of the newborn discharge and any subsequent discharges.

OYDQ test number	OYDQ test title	Short description	Rationale
D0301-118	Mother's Health Care Number Recorded on In-Province Newborn's Abstract	When available, the provincial/territorial health care number (HCN) assigned to the newborn should be recorded.	High percentages of newborn abstracts with the mother's HCN recorded as HCN diminish the ability to link records of the newborn discharge and any subsequent discharges.
D0402-64	Unknown Admission Time	Admission Time is unknown.	This field is important for episode building.
D0502-65	Unknown Discharge Time	Discharge Time is unknown.	This field is important for episode building.
D0505-175	Discharge Disposition Inconsistent With Institution To	The Discharge Disposition and the CIHI Institution Type assigned to the Institution To number must match.	Accurate data is required for analysis.
D0701-149	(MODIFIED) Potential Alternate Level of Care (ALC) Under-Reporting	Acute inpatients that are likely ALC but ALC patient service is not recorded.	ALC data is well used at every level of the health service system and across acute and continuing care sectors.
D0703-50	Unknown Weight 0.001 Recorded for Newborns and Neonates Less Than 29 Days	Weight is recorded as unknown for newborns and neonates less than 29 days.	Weight impacts the CMG assignment. A high percentage of abstracts with 0001 (Unknown) weight may indicate facility documentation issues.
D1002-32	Incorrect Infant Status of Singleton Within a Multiparous Delivery Episode	The Diagnosis Code of Z38.– on a newborn's abstract indicates the plurality of birth (singleton, twin, triplet, etc.), the same number of newborn abstracts should be linked to the mother's abstract.	Research on multiple birth outcomes is adversely affected by incorrect data.
D1002-52	Post-Procedure Disorder Codes Recorded Without an External Cause Code	All post-procedural disorder codes require an external cause code (Y60–Y84 or V01–X59).	Post-procedural codes are used in reports which are provided to external clients.
D1002-127	Acute Myocardial Infarction Assigned Diagnosis Type (3)	Incorrect Diagnosis Typing for Acute Myocardial Infarction coding	Impacts important Organisation for Economic Co-operation and Development (OECD) indicator.

OYDQ test number	OYDQ test title	Short description	Rationale
D1002-134	MRSA and VRE Infections — Missing Additional Code for Site of Infection	When a current infection is documented as due to one of the “super bugs” referred to as MRSA (methicillin resistant staphylococcus aureus) or VRE (vancomycin resistant enterococcus), it is mandatory to assign the codes that identify the site of the infection, the causative organism and the drug resistance.	Impacts important patient safety indicator. Accurate data are required for analysis.
D1002-136	Incorrect Coding of Post-Intervention Sepsis	When a case of sepsis meets the definition of a post-intervention condition, the primary code must be a T-code (from the list provided) and the code identifying the type of sepsis is assigned mandatory as a Diagnosis Type (3) along with the applicable external cause code from Y83–Y84. The application of the diagnosis cluster links all the codes together.	Impacts important patient safety indicator. Accurate data are required for analysis.
D1002-148	More Than One Outcome of Delivery (Z37) Code	When a delivery occurs during an episode of care, only one outcome of delivery (Z37) code is recorded on abstract.	Impacts the CMG assignment and birthing outcomes are frequently used in analysis.
D1002-152	Neurologically Determined Death Not Assigned Diagnosis Type (3)	The Diagnosis Code G93.81 *Neurologically determined death* must be assigned as a Diagnosis Type (3).	Impacts important mortality ratio indicator.
D1002-163	Alcohol Poisoning External Cause Code Without Corresponding Alcohol Poisoning T-Code	When an alcohol poisoning external cause code (X45, X65 or Y15) is recorded, it requires a corresponding alcohol poisoning T-code from category T51.	Impacts CIHI’s Problematic Substance Use indicator development.
D1002-168	High Vaginal Laceration Without Corresponding CCI Repair Code	Diagnosis Code O71.401 or O71.404 *Obstetric high vaginal laceration* is recorded without Intervention Code 5.PC.80.JU *Surgical repair, postpartum, of current obstetric high vaginal laceration*.	Impacts important Patient Safety indicator.

OYDQ test number	OYDQ test title	Short description	Rationale
D1002-169	Vaginal Delivery Following Previous Caesarean Section in Single Delivery Episode Without Vaginal Delivery Intervention Code	Mismatch of Diagnosis Code and Intervention Code.	Impacts CMG assignment, and this data is frequently used in reporting.
D1002-170	I64 *Stroke, not specified as haemorrhage or infarction* Recorded	I64 *Stroke, not specified as haemorrhage or infarction* is assigned in very limited circumstances.	Stroke is a high-priority health initiative.
D1002-171	Cardiac Arrest Assigned Diagnosis Type (2) Without a Cardiac Resuscitative Intervention Code	Diagnosis Code and Diagnosis Type without a corresponding Intervention Code	Impacts important cardiac care indicator.
D1002-186	Confirmed or Suspected COVID-19 in Obstetrics Delivered	When an obstetrics **delivered** patient is diagnosed with confirmed or suspected COVID-19, O98.5– *Other viral diseases complicating pregnancy, childbirth and the puerperium* with the sixth digit 1 or 2 must be assigned as a significant diagnosis type.	Accurate data is required for in-depth analyses on the impact of COVID-19 on health care systems.
D1002-187	Confirmed or Suspected COVID-19 in Obstetrics Undelivered	When an obstetrics **undelivered** patient is diagnosed with confirmed or suspected COVID-19, O98.5– *Other viral diseases complicating pregnancy, childbirth and the puerperium* with the sixth digit 3 or 4 must be assigned as a significant diagnosis type.	Accurate data is required for in-depth analyses on the impact of COVID-19 on health care systems.
D1002-188	Diabetes in Pregnancy — Delivered Episode of Care	When a patient is pregnant and has pre-existing diabetes mellitus or is diagnosed with gestational diabetes mellitus, it is mandatory to assign the applicable code from Chapter XV — Pregnancy, childbirth and the puerperium (O00–O99).	Accurate data is required for in-depth analyses on diabetes mellitus and pregnancy.

OYDQ test number	OYDQ test title	Short description	Rationale
D1002-189	Diabetes in Pregnancy — Antepartum Episode of Care	When a patient is pregnant and has pre-existing diabetes mellitus or is diagnosed with gestational diabetes mellitus, it is mandatory to assign the applicable code from Chapter XV — Pregnancy, childbirth and the puerperium (O00–O99).	Accurate data is required for in-depth analyses on diabetes mellitus and pregnancy.
D1002-194	Incorrect J44.– (COPD) Code Assigned With Lower Respiratory Infection Code	When a patient is diagnosed with acute bronchiolitis (J21.–), acute bronchitis (J20.–) or pneumonia in any form (J10.0, J11.0, J12.–, J13, J14, J15.–, J16.–, J18.–) and also has chronic obstructive pulmonary disease (COPD), the COPD is classified to J44.0 *Chronic obstructive pulmonary disease with acute lower respiratory infection*.	Accurate data is required for in-depth analyses.
D1004-185	U07.4 *Post COVID-19 condition* Assigned Diagnosis Type M, 1, 2, W, X, Y	When U07.4 *Post COVID-19 condition* is assigned on an abstract, the diagnosis type must be (3).	Accurate data is required for in-depth analyses on the impact of COVID-19 on health care systems.
D1004-193	R57.2 *Septic shock* as MRDx	R57.2 *Septic shock* must never be the MRDx.	Accurate data is required for in-depth analyses.
D1102-111	Repair High Vaginal Laceration Without a Corresponding Diagnosis Code	Surgical repair of high vaginal laceration without a corresponding Diagnosis Code	Impacts important patient safety indicator.
D1102-180	Cementless Hip/Knee Replacement CCI Codes and the Presence of Cement Sticker	When a cement product number is present, the 10th digit of the corresponding hip/knee replacement CCI code must be “N” or “Q” — with synthetic material.	Accurate data is required for in-depth analyses on hip/knee replacements.
D1103-172	Incorrect Status Attribute With 3.IP.10.VX	Coronary angiography Intervention Code with incorrect Status Attribute	Accurate data is required for in-depth analyses on coronary angiography.

OYDQ test number	OYDQ test title	Short description	Rationale
D1103-173	Incorrect Status Attribute With 3.IP.10.VC and/or 3.IP.10.VZ	Intervention Code 3.IP.10. VC and/or 3.IP.10.VZ are recorded AND Status Attribute is DX, I or UN. Status Attribute values DX, I and UN are for use only with 3.IP.10.VX (coronary angiography).	Accurate data is required for in-depth analyses on coronary angiography.
D1104-82	Incorrect Location Attribute With 3.IP.10.VX	Coronary angiography Intervention Code with incorrect Location Attribute	Accurate data is required for in-depth analyses on coronary angiography.
D1104-174	Incorrect Location Attribute With 3.IP.10.VC and/or 3.IP.10.VZ	Intervention Code 3.IP.10. VC and/or 3.IP.10.VZ is recorded AND Location Attribute is CB, FY, LY, RY or U. Location Attribute values CB, FY, LY, RY and U are for use only with 3.IP.10.VX (coronary angiography).	Accurate data is required for in-depth analyses on coronary angiography.
D1105-86	Extent Attribute UN *(Unknown)* With Hip Replacement	The Extent Attribute UN *(Unknown)* should be used rarely for the implantation of hip prosthesis as the documentation should identify the components implanted.	Attributes are used by CIHI to report on hip replacements.
D1105-166	Incorrect Value of Extent Attribute for Hip Arthroplasty Codes 1.VA.53.^^	When recording hip arthroplasty with implantation prosthetic device codes 1.VA.53.^^, ensure that the value of the extent attribute matches the corresponding Intervention Code.	Generate correct procedure types for primary hip arthroplasty for the Canadian Joint Replacement Registry (CJRR).
D1113-35	Three or More OOH Intervention Episodes in One Day	Recording the Intervention Episode Start Date multiple times for OOH interventions may result in erroneously increasing the number of OOH intervention episodes performed.	Impacts intervention event factor. Intervention count is used in Resource Intensity Weight assignment.
D1515-177	Legal Status Upon Arrival to ED Must Not Be Blank for Non-NACRS L3 ED Facilities	Legal Status Upon Arrival to ED is mandatory for facilities not also reporting NACRS Level 3 ED data.	Accurate data is important for data analysis.

OYDQ test number	OYDQ test title	Short description	Rationale
D1515-178	Legal Status Upon Arrival to ED Must Be Blank for NACRS L3 ED Facilities	Legal Status Upon Arrival to ED must be blank for facilities also reporting NACRS Level 3 ED data.	Accurate data is important for data analysis.
D1515-179	Legal Status Upon Arrival to ED Without Entry Code E — Emergency	Legal Status Upon Arrival to ED must be blank if patient was not admitted via the ED.	Accurate data is important for data analysis.
D1517-190	Type of Restraint N Recorded With Type of Restraint M, C, P or S	When Type of Restraint M, C, P or S is recorded, Type of Restraint N (None) should not be recorded.	Accurate data is required for analysis.
D1517-191	Type of Restraint M, C, P, S or N Recorded More Than Once	When Type of Restraint M, C, P, S or N is recorded, it must be recorded only once.	Accurate data is required for analysis.
D1518-192	Frequency of Restraint Use N Recorded With Type of Restraint M, C, P or S	When Type of Restraint M, C, P or S is recorded, Frequency of Restraint Use N (None) should not be recorded.	Accurate data is required for analysis.
D1618-99	Project 340 — Project Not Completed When an "Applicable Condition" Code Is Recorded (D1618-99)	When a stroke Diagnosis Code is recorded, the Project Number 340 must be completed.	Stroke is a high-priority health initiative.
D1618-103	Project 340 — Not Applicable, Unknown or Invalid Value for *Prescription for Antithrombotic Medication at Discharge* (D1618-103)	When Project 340 is recorded, it is mandatory to complete Field 12 *Prescription for Antithrombotic Medication at Discharge*. This field captures whether patients with a diagnosis of ischemic stroke received a prescription for antithrombotic medication at discharge.	Stroke is a high-priority health initiative.
D1618-121	Project 340 — Missing, Invalid or Unknown Value for *Date and Time of Acute Thrombolysis Administration* When *Administration of Acute Thrombolysis* is Y or P	When Project 340 is recorded, it is mandatory to complete Fields 04 to 11 (*Date and Time of Acute Thrombolysis Administration*). This field captures the specific date and time that a patient with acute ischemic stroke received acute thrombolysis, for those who were administered this medication.	Stroke is a high-priority health initiative.

OYDQ test number	OYDQ test title	Short description	Rationale
D1618-123	Project 340 — Invalid or Unknown Value for *Stroke Symptom Onset Date and Time* (D1618-123)	When Project 340 is recorded, it is mandatory to complete Fields 13 to 24 (*Stroke Symptom Onset Date and Time*). This field captures the date and time that the patient first started to experience stroke symptoms, regardless of the location of the patient at the time of symptom onset.	Stroke is a high-priority health initiative.
D1619-137	Project 740 — Project Not Completed When an "Applicable Condition" Code Is Recorded (D1619-137)	Special project 740 is mandatory to report for all DAD acute inpatient admissions of patients 18 years and older with a new ischemic and/or haemorrhagic stroke.	Stroke is a high-priority health initiative.
D1619-138	Project 740 — Invalid Value for Documentation of AlphaFIM® Scores	When Project 740 is recorded, Field 01 (*Documentation of AlphaFIM® Scores*) must be uppercase Y or N.	Stroke is a high-priority health initiative.
D1619-139	Project 740 — Invalid Value for AlphaFIM® Completion Date When Documentation of AlphaFIM® Scores Is Y	When special project 740 is recorded and Field 01 (*Documentation of AlphaFIM®*) is recorded with "Y" (Yes, there is documentation) the Fields 02–09 (*AlphaFIM® Completion Date*) must be a valid date or 99999999.	Stroke is a high-priority health initiative.
D1619-141	Project 740 — AlphaFIM® Completion Date Not Between Admission Date and Discharge Date	When special project 740 is recorded and Field 01 (*Documentation of AlphaFIM®)* is recorded with "Y" (Yes, there is documentation), Fields 02–09 (*AlphaFIM® Completion Date*) must be greater than or equal to the *Admission Date* and less than or equal to the *Discharge Date.*	Stroke is a high-priority health initiative.

OYDQ test number	OYDQ test title	Short description	Rationale
D1619-142	Project 740 — Invalid Value for Projected FIM® — 13 Raw Motor Rating	When special project 740 is recorded and Field 01 (*Documentation of AlphaFIM®*) is recorded with "Y" (Yes, there is documentation), the Fields 10–11 (*Projected FIM® — 13 Raw Motor Rating*) must be greater than or equal to 13 and less than or equal to 81 or equal to 99 (unknown).	Stroke is a high-priority health initiative.
D1619-144	Project 740 — Invalid Value for Projected FIM® — 5 Raw Cognitive Rating	When special project 740 is recorded and Field 01 (Documentation of AlphaFIM®) is recorded with "Y" (Yes, there is documentation) the Fields 12–13 (Projected FIM® — 5 Raw Cognitive Rating) must be greater than or equal to 7 and less than or equal to 35 or equal to 99 (unknown).	Stroke is a high-priority health initiative.
D1620-155	Project 440 — Invalid Value for CTA, CTP or MRA Scan Performed Prior to Start of Endovascular Thrombectomy Intervention	When Special Project 440 Endovascular Thrombectomy is recorded, it is mandatory to record Field 01 CTA, CTP or MRA Scan Performed Prior to Start of Endovascular Thrombectomy Intervention.	Endovascular thrombectomy is a high-priority health initiative.
D1620-156	Project 440 — Invalid Value for Date and Time of Qualifying Scan Prior to Endovascular Thrombectomy Intervention When CTA, CTP or MRA Scan Performed Prior to Start of Endovascular Thrombectomy Intervention Is P or Y	When Special Project 440 Endovascular Thrombectomy is recorded and Field 01 is recorded with P (Yes, prior) or Y (Yes), fields 02–09 Date and Time of Qualifying Scan Prior to Endovascular Thrombectomy Intervention must be a valid date and time or 99999999 (unknown).	Endovascular thrombectomy is a high-priority health initiative.
D1620-157	Project 440 — Invalid Value for Date and Time of Arterial Puncture	When Special Project 440 Endovascular Thrombectomy is recorded, fields 10–15 Date and Time of Arterial Puncture must be a valid date and time or 999999 (unknown).	Endovascular thrombectomy is a high-priority health initiative.

OYDQ test number	OYDQ test title	Short description	Rationale
D1620-158	Project 440 — Invalid Value for First Reperfusion Achieved	When Project 440 Endovascular Thrombectomy is recorded, it is mandatory to record Field 16 First Reperfusion Achieved.	Endovascular thrombectomy is a high-priority health initiative.
D1620-159	Project 440 — Invalid Value for Date and Time of First Reperfusion Achieved When First Reperfusion Achieved Is Y	When Special Project 440 Endovascular Thrombectomy is recorded and Field 16 First Reperfusion Achieved is recorded with Y (Yes), Fields 17–22 Date and Time of First Reperfusion Achieved must be a valid date and time or 999999 (unknown).	Endovascular thrombectomy is a high-priority health initiative.
D1620-160	Project 440 — Invalid Value for Final Endovascular Thrombectomy Reperfusion Outcome Achieved	When Project 440 Endovascular Thrombectomy is recorded, it is mandatory to record Field 23 Final Endovascular Thrombectomy Reperfusion Outcome Achieved.	Endovascular thrombectomy is a high-priority health initiative.
D1801-120	Number of Previous Term Deliveries and Number of Pre-Term Deliveries Indicate No Previous Delivery and Diagnosis Code or Caesarean Section Status Attribute Indicate Previous Delivery	Mismatch between no previous deliveries and Diagnosis Code or Intervention Status Attribute indicating previous Caesarean section	Impacts important obstetrical indicators.
D1801-135	Missing Value for Number of Previous Term Deliveries and/or Number of Previous Pre-Term Deliveries for Obstetrics Delivered Cases	When obstetrics delivered code is recorded, it is mandatory to report Number of Previous Term Deliveries and Number of Previous Pre-Term Deliveries.	Impacts important obstetrical indicators.
D2010-161	Scanner Used to Input Product Number and Cement — Product Number but AIM Code Was Not Enabled	AIM (Automatic Identification and Mobility) code was not enabled when the scanner was used to input Product Number and Cement — Product Number. AIM code is a scanner parameter that is enabled by scanning a barcode or series of barcodes in the scanner's product reference manual.	The presence of the AIM code ensures that CIHI can appropriately extract the product number.

Open-year data quality tests

1 Potential Extra Abstracts (D0103-18)

Criteria	Description
Selection criteria	Abstracts where the values recorded in the group of data elements below are the same in more than one abstract.
Data elements	Province/Territory, Institution Number, Health Care Number, Birthdate, Recorded Sex or Gender, Postal Code, Admission Date, Admission Time, Discharge Date, Discharge Time, Diagnosis Code (MRDX), Intervention Code (principal), Weight.

2 Incomplete Linkage of Mothers and Babies (D0112-23)

Rule

The Maternal/Newborn Chart Number on the mother's record must be the same as the Chart Number recorded on her newborn's record. The Maternal/Newborn Chart Number on the newborn's record must be the same as the Chart Number recorded on his or her mother's record.

Criteria	Description
Selection criteria	Diagnosis Code on mother's record is Z37.0–, Z37.2–, Z37.3–, Z37.5–, Z37.6– or Z37.9– (delivery) and Most Responsible Diagnosis Code is not O02.– to O05.– *Pregnancy with abortive outcome* and One of the Intervention Codes is 5.MD.50.^^ to 5.MD.60.^^ (delivery) Entry Code on newborn's record is N (Infant born alive within the reporting facility) and Most Responsible Diagnosis Code is not P96.4 *Termination of pregnancy, affecting fetus and newborn*. Mothers' abstracts where the Maternal/Newborn Chart Number is not the same as the Chart Number in the newborns' abstracts. Newborns' abstracts where the Maternal/Newborn Chart Number is not the same as the Chart Number in the mother's abstracts.
Data elements	Maternal/Newborn Chart Number, Chart Number, Entry Code, Diagnosis Code, Diagnosis Type, Intervention Code
Correct case example	The Chart Number and Maternal/Newborn Chart Number for the Mother should be M00001 and N00001 respectively. The Chart Number and Maternal/Newborn Chart Number for the Newborn should be N00001 and M00001 respectively. The Maternal/Newborn Chart Number on the mother's record is correctly recorded with newborn's Chart Number, and the Maternal/Newborn Chart Number on the newborn's record is correctly recorded with mother's Chart Number.
Reference	DAD Abstracting Manual: Group 01 — Submission Control Data Elements, Field 12 — Maternal/Newborn Chart Number

3 Mother's Health Care Number Recorded on Out-of-Province Newborn's Abstract (D0301-117)

Rule

When available, record the provincial/territorial health care number (HCN) assigned to the newborn.

Northwest Territories and Yukon:

- When the newborn's HCN is not available, record the mother's HCN.
- When the mother's HCN is not available, record 1 (not applicable) for out-of-province newborns.

New Brunswick:

- When the mother's HCN is not available for out-of-province newborns, record 1 (not applicable).

Newfoundland and Labrador, P.E.I., Ontario, British Columbia and Nunavut:

- The mother's health care number cannot be recorded as the health care number on the newborn's abstracts.
- When the newborn's HCN is not available, record 1 (not applicable) for out-of-province newborns.

Nova Scotia and Saskatchewan:

- When the HCN for an out-of-province newborn is not available, record 1 (not applicable).

Manitoba:

- When the newborn's HCN is not available, record the mother's HCN for out-of-province newborns or record 1 (not applicable) for out-of-country newborns.

Note: This test will be completed for all out-of-province newborns' abstracts with a valid HCN. A high percent of out-of-province newborn abstracts with the mother's HCN recorded as HCN may indicate a need to investigate practices around the capture of out-of-province HCNs for newborns.

Criteria	Description
Selection criteria	**Inclusions:** The abstracts of newborns where • Entry Code is N (Infant born alive within the reporting facility), AND • Province/Territory Issuing HCN is not the same as the province/territory of the reporting facility, AND • HCN has a valid format, AND • Province/Territory Issuing HCN and HCN are equal to the Province/Territory Issuing HCN and HCN on a mother's abstract from the same reporting facility. The abstracts of mothers are used to identify newborns' abstracts with the mother's HCN recorded as HCN. The selection criteria for mothers' abstracts are • One of the Diagnosis Codes is Z37.0–, Z37.2–, Z37.3–, Z37.5–, Z37.6– or Z37.9– (delivery), AND • Most Responsible Diagnosis Code is not O02.– to O05.– (abortive outcome), AND • One of the Intervention Codes is 5.MD.50.^^ to 5.MD.60.^^ (delivery). **Exclusions:** 1. Province/Territory Issuing Health Care Number is 99 (not applicable) or CA (Canada). 2. Entry Code is S (Stillborn). 3. Admission Category is R (Cadaveric Donor). 4. HCN is 0 (Insured resident of reporting province/territory but HCN is not available) or 1 (Not applicable) or HCN has invalid format.
Data elements	Province/Territory, HCN, Province/Territory Issuing HCN, Entry Code, Admission Category, Diagnosis Code, Intervention Code
Correct case example	When available, the provincial/territorial HCN assigned to the newborn is recorded. When the newborn's HCN is not available, record 1 (not applicable) for out-of-province newborn if the province/territory of the reporting facility is Newfoundland and Labrador, P.E.I., Nova Scotia, Ontario, Saskatchewan, British Columbia and Nunavut.
Reference	DAD Abstracting Manual: Group 03 — Patient/Client Demographics, Field 01 — Health Care Number

4 Mother's Health Care Number Recorded on In-Province Newborn's Abstract (D0301-118)

Rule

When available, record the provincial/territorial health care number (HCN) assigned to the newborn.

Northwest Territories and Yukon:

- When the newborn's HCN is not available, record the mother's HCN.
- When the mother's HCN is not available, record 0 (HCN not available) for provincial/territorial residents.

Newfoundland and Labrador, P.E.I., Ontario, British Columbia and Nunavut:

- The mother's health care number cannot be recorded as the health care number on the newborn's abstracts.
- When the newborn's HCN is not available, record 0 (HCN not available) for provincial/territorial residents.

Nova Scotia and Saskatchewan:

- The newborn's HCN must always be recorded for provincial/territorial residents.

Manitoba:

- When the newborn's HCN is not available, record 0 (HCN not available) for provincial/territorial residents.

Note: This test will be completed for all in-province newborns' abstracts with a valid HCN. A high percent of in-province newborn abstracts with the mother's HCN recorded as HCN may indicate a need to investigate practices around the capture of HCNs for newborns.

Criteria	Description
Selection criteria	**Inclusions:** The abstracts of newborns where: • Entry Code is N (Infant born alive within the reporting facility), AND • Province/Territory Issuing HCN is the same as the province/territory of the reporting facility, AND • HCN has a valid format, AND • Province/Territory Issuing HCN and HCN are equal to the Province/Territory Issuing HCN and HCN on a mother's abstracts from the same reporting facility. The abstracts of mothers are used to identify newborns' abstracts with the mother's HCN recorded as HCN. The selection criteria for mothers' abstracts are • One of the Diagnosis Codes is Z37.0–, Z37.2–, Z37.3–, Z37.5–, Z37.6– or Z37.9– (delivery), AND • Most Responsible Diagnosis Code is not O02.– to O05.– (abortive outcome), AND • One of the Intervention Codes is 5.MD.50.^^ to 5.MD.60.^^ (delivery). **Exclusions:** 1. Province/Territory Issuing Health Care Number is 99 (not applicable) or CA (Canada). 2. Entry Code is S (Stillborn). 3. Admission Category is R (Cadaveric Donor). 4. HCN is 0 (Insured resident of reporting province/territory but HCN is not available) or 1 (Not applicable) or HCN has invalid format.
Data elements	Province/Territory, HCN, Province/Territory Issuing HCN, Entry Code, Admission Category, Diagnosis Code, Intervention Code
Correct case example	When available, the provincial/territorial HCN assigned to the newborn is recorded. When the newborn's HCN is not available, record 0 (HCN not available) for in-province newborn if the province/territory of the reporting facility is Newfoundland and Labrador, P.E.I., Ontario, British Columbia and Nunavut.
Reference	DAD Abstracting Manual: Group 03 — Patient/Client Demographics, Field 01 — Health Care Number

5 Unknown Admission Time (D0402-64)

Rule

Admission Date/Time is the date and time that the patient was officially registered as an inpatient or a day surgery visit. A patient is considered an inpatient when the physician's order to admit is given.

An inpatient abstract should be created when an ED patient is admitted to an acute care unit.

- Record the Admission Date/Time as the date and time the physician gave the order to admit. The date and time the patient physically leaves the emergency department and does not return during that encounter will be captured in Date/Time Patient Left the ED.
- When a patient is admitted and is not immediately transferred to the designated unit (for example placed in an ED holding area), the Admission Date/Time must reflect when the order to admit was provided by the physician. The date and time the patient physically leaves the emergency department and does not return during that encounter will be captured in Date/Time Patient Left the ED.
- When a patient is admitted but remains in the ED for the entire visit because a bed is unavailable in the designated unit, a DAD abstract must still be completed even though the patient was never transferred to an acute care bed.
- The Admission Date/Time for newborns delivered at the reporting facility must be the same as the date and time of birth.

Note: A high percent of abstracts with unknown times may indicate a need to investigate practices around the capture of this crucial data for quality indicators.

Criteria	Description
Selection criteria	Abstracts where Admission Time is 9999 (unknown)
Data element	Admission Time

6 Unknown Discharge Time (D0502-65)

Rule

Discharge Date/Time is the date and time when the patient was formally discharged.

- Record the date/time the patient was formally discharged and physically left the bed in the nursing unit.
- Additional information on how to record the date/time for patients absent without leave (AWOL), for patients who do not return from a pass and for what constitutes brain death can be found in the DAD Abstracting Manual.

Criteria	Description
Selection criteria	Abstracts where Discharge Time is 9999 (unknown)
Data element	Discharge Time

7 Discharge Disposition Inconsistent With Institution To (D0505-175)

Rule

The Discharge Disposition and the CIHI Institution Type assigned to the Institution To number must match.

Note: There are known provincial variations. Ontario and Alberta clients should refer to the Notes tab in their OYDQ report.

Criteria	Description
Selection criteria	Abstracts where Discharge Disposition is not consistent with CIHI Institution Type (derived) assigned to Institution To number: Where • Discharge Disposition 04 is not mapped to CIHI Institution Type 0, 6, 8, F, J, M, N, U or Blank OR • Discharge Disposition 10 is not mapped to CIHI Institution Type 1, 2, 3, 5, 9, S or U OR • Discharge Disposition 20 is not mapped to CIHI Institution Type E, A, N, 6 or U OR • Discharge Disposition 30 is not mapped to CIHI Institution Type 4, T, P or U OR • Discharge Disposition 40 is not mapped to CIHI Institution Type G, H or U
Data elements	Discharge Disposition, Institution To
Correct case example	Discharge Disposition 10 — Inpatient Care is recorded along with an Institution To number assigned to CIHI Institution Type 1 — Acute Inpatient Care.
Reference	• Jurisdictional Disposition reference guides can be downloaded via the DAD/NACRS Abstracting Manual link in My Services (with the exception of Yukon). The Instructions tab describes how to use the Disposition Reference Guide while the third tab provides mapping of DAD Discharge Dispositions to province-/territory-specific levels of care. Alberta facilities should refer to the Alberta Supplement to 2022–2023 DAD manual. • DAD Abstracting Manual: Group 05 — Separation, Field 04 Institution To, Field 05 Discharge Disposition • Job Aid — Ensuring Accurate Discharge/Visit Disposition and Institution To Assignment

8 (MODIFIED) Potential Alternate Level of Care (ALC) Under-Reporting (D0701-149)

Rule

When a patient is occupying a bed in a facility and does not require the intensity of resources/services provided in that care setting (acute, chronic or complex continuing care, mental health or rehabilitation), the patient must be designated ALC at that time by the most appropriate care team member, which may be a physician, long term care assessor, patient care manager, discharge planner or other care team member.

The decision to assign ALC status is a clinical responsibility. In order to enter the ALC patient service (99) on the DAD abstract, there must be clear, consistent documentation by the clinical staff, preferably on an approved ALC Designation form.

Note: Accurate ALC reporting is key to monitoring and improving access to services, patient flow and outcomes in acute care. This test estimates the percent of acute inpatients that are likely ALC but have no ALC days recorded.

As of February 2021, the methodology for this OYDQ test has been modified to use selection criteria that are more specific, which should result in fewer records being flagged. For those who do not currently have detailed reports for this particular OYDQ test and are interested in helping us validate whether error cases were appropriately flagged, please email cad@cihi.ca.

Criteria	Description
Selection criteria	Acute inpatients that are likely ALC but have no ALC days recorded: • Calculated Length of Stay (LOS) is greater than Expected Length of Stay (ELOS)*, adjusted for Case Mix Groups (CMG); and • Discharge Disposition is 20 (ED and Ambulatory Care), 30 (Residential Care), 40 (Group/Supportive Living), 04 (Home with Support/Referral) or 90 (Correctional Facility); and • Main Patient Service is not 99 (ALC); and • Service Transfer Service is not 99 (ALC); and • Typical and long stay cases (RIW inpatient atypical indicator 00 or 10) **Exclusions:** 1. Obstetric cases (Major Clinical Category 13 and 14) 2. Pediatric cases (younger than 17) 3. Selected mental health diagnoses to create a standard hospital population (Most Responsible Diagnosis F10–F99) Methodology for calculation of facility, provincial and national percentages: A ÷ B × 100%, where: A = Number of potential ALC cases identified by the above selection criteria. B = A + (Number of acute inpatient hospitalizations with ALC LOS > 0) * CMGs are assigned to 3 ELOS groups based on their mean ELOS: 1. 1 to 5 days 2. Greater than 5 days and less than 10 days 3. 10 or more days The number of days in the 75th percentile of the total LOS days minus ELOS days of all known ALC cases in the same ELOS group is applied to all CMGs within that group.
Data elements	Admission Date, Discharge Date, Discharge Disposition, Main Patient Service, Service Transfer Service, Diagnosis Code, Diagnosis Type, MCC, CMG, RIW Atypical Code, ELOS, Age (Derived)
Correct case example	Service Transfer Service 99 (ALC) was recorded when the patient was designated as ALC for a portion of his/her stay in the facility and was ALC for more than 24 hours.
References	DAD Abstracting Manual: Group 07 — Patient Service, Group 08 — Service Transfers, Section 3 — Additional Abstracting Information — Alternate Level of Care (ALC) Definitions and Guidelines to Support ALC Designation in Acute Inpatient Care Job Aid — Alternate Level of Care Diagnosis List: Clarification of Use

9 Unknown Weight 0.001 Recorded for Newborns and Neonates Less Than 29 Days (D0703-50)

Rule

The weight of a newborn or neonate less than 29 days on admission to the facility must be recorded.

Every effort should be made to record the admission weight since Weight is required for Case Mix Group (CMG+) assignment.

Criteria	Description
Selection criteria	The abstracts of newborns and neonates where Age Code is D (Days) or B (Newborn or Stillbirth) AND Age Unit is 0–28 AND Weight is 0.001 AND Entry Code is not equal to S (Stillborn)
Data elements	Entry Code, Age (Derived), Weight

10 Incorrect Infant Status of Singleton Within a Multiparous Delivery Episode (D1002-32)

Rule

According to the Canadian Coding Standards, every newborn record must include a code from Z38.– *Liveborn infants according to place of birth* to indicate the plurality of birth:

- A liveborn singleton is assigned a code from Z38.0– to Z38.2–.
- Liveborn twins, triplets or other multiple births are assigned a code from Z38.3– to Z38.8–.

A multiple birth newborn record must not have a code from Z38.0– to Z38.2– (singleton) recorded.

Most multiple births are delivered on the same date; however, some multiple births can occur on different dates. The codes Z38.3– to Z38.8– describe the plurality of the pregnancy and apply even when the births occur on different days or at different locations and/or when 1 or more of the babies are stillborn.

Note: This analysis focuses on multiple births delivered on the same date. Clients may also perform analyses on different delivery dates, different delivery locations and where 1 or more newborns are stillborn.

Criteria	Description
Selection criteria	Newborn abstracts with Diagnosis Code Z38.0– to Z38.2– (exclude P96.4 *Termination of pregnancy* as Most Responsible Diagnosis) AND More than one Maternal/Newborn Chart Number recorded with the same admission date.
Data elements	Entry Code, Chart Number, Maternal/Newborn Chart Number, Admission Date, Diagnosis Code
Correct case examples	Mother: Chart Number: 8866766 Baby A: Admission Date: 2013/11/01 Entry Code: N Chart Number: 123455 Maternal/Newborn Chart Number: 8866766 Z38.300 *Twin, born in hospital, delivered vaginally, product of both spontaneous (NOS) ovulation and conception*.

Criteria	Description
Correct case examples (continued)	Baby B: Admission Date: 2013/11/01 Entry Code: N Chart Number: 123456 Maternal/Newborn Chart Number: 8866766 Z38.310 *Twin, born in hospital, delivered by caesarean, product of both spontaneous (NOS) ovulation and conception*
Reference	Canadian Coding Standards: Diagnosis Typing Definitions for DAD

11 Post-Procedural Disorder Codes Recorded Without an External Cause Code (D1002-52)

Rule

All post-procedural disorder codes (see Appendix A) require an external cause code (Y60–Y84 or V01–X59).

Criteria	Description
Selection criteria	Abstracts with a post-procedural disorder Diagnosis Code (see Appendix A) without an External Cause Code (Y60–Y84 or V01–X59).
Data element	Diagnosis Code
Correct case example	K91.42 (M) *Malfunction of colostomy stoma, not elsewhere classified* **[Diagnosis Cluster A]** Y83.3 (9) *Surgical operation with formation of external stoma as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure* **[Diagnosis Cluster A]**
References	Canadian Coding Standards: Post-Intervention Conditions Self-Learning Product: Classifying Post-Intervention Conditions: ICD-10-CA Code Assignment

12 Acute Myocardial Infarction Assigned Diagnosis Type (3) (D1002-127)

Rule

A myocardial infarction within the acute phase is always assigned a significant Diagnosis Type (M, 1, 2, W, X, Y) per the coding standard Acute Coronary Syndrome (ACS).

Exceptions:

1. When a patient is readmitted with a diagnosis classifiable to category I22.–

   Subsequent myocardial infarction, a code from category I21.– *Acute myocardial infarction* may be assigned as an optional Diagnosis Type (3)/other problem to indicate the site of the original MI.
2. When I21.– is recorded with a Diagnosis Prefix Q, Diagnosis Type (3) may be appropriate for the case.
3. Obstetric cases where O99.4– is recorded, I21.– is assigned a Diagnosis Type (3) to identify MI as the specific condition.

Criteria	Description
Selection criteria	Abstracts where Diagnosis Code I21 is recorded as Diagnosis Type (3) AND Diagnosis Prefix is not Q AND Diagnosis Code I22.– AND O99.4– is not recorded on the same abstract.
Data elements	Diagnosis Code, Diagnosis Type, Diagnosis Prefix
Correct case examples	I21.1 (M) Acute transmural myocardial infarction of inferior wall R94.30 (3) Electrocardiogram suggestive of ST segment elevation myocardial infarction [STEMI]
Reference	Canadian Coding Standards: Acute Coronary Syndrome

13 MRSA and VRE Infections — Missing Additional Code for Site of Infection (D1002-134)

Rule

When a current infection is documented as due to one of the “super bugs” referred to as MRSA (methicillin-resistant *Staphylococcus aureus*) or VRE (vancomycin-resistant enterococcus), it is mandatory to assign the codes that identify the site of the infection, the causative organism and the drug resistance (as described below). The Diagnosis Cluster is mandatory to link all the codes together.

MRSA infection:

- A code that identifies the site of the infection;
- B95.6 *Staphylococcus aureus as the cause of diseases classified to other chapters*; and
- U82.1 *Resistance to methicillin*

VRE infection:

- A code that identifies the site of the infection;
- B95.21 *Enterococcus as the cause of diseases classified to other chapters*; and
- U83.0 *Resistance to vancomycin*

Criteria	Description
Selection criteria	Abstracts where Diagnosis Codes U82.1 *Resistance to methicillin* AND B95.6 Staphylococcus aureus as the cause of diseases classified to other chapters are recorded with the same Diagnosis Cluster value AND there is no other code in the same Diagnosis Cluster OR Abstracts where Diagnosis Codes U83.0 *Resistance to vancomycin* and B95.21 *Enterococcus as the cause of diseases classified to other chapters* are recorded with the same Diagnosis Cluster value AND There is no other code in the same Diagnosis Cluster.
Data elements	Diagnosis Code, Diagnosis Cluster
Correct case examples	M00.01 (M) *Staphylococcal arthritis and polyarthritis, shoulder region* **[Diagnosis Cluster A]** AND B95.6 (3) *Staphylococcus aureus as the cause of diseases classified to other chapters* **[Diagnosis Cluster A]** AND U82.1 (1) *Resistance to methicillin* **[Diagnosis Cluster A]**
References	Canadian Coding Standards: Drug-Resistant Microorganisms Diagnosis Cluster

14 Incorrect Coding of Post-Intervention Sepsis (D1002-136)

Rule

When a case of sepsis meets the definition of a post-intervention condition, the primary code must be a T-code (from the list below, as applicable) and the code identifying the type of sepsis is assigned mandatory as a Diagnosis Type (3) along with the applicable external cause code from Y83-Y84. The application of the Diagnosis Cluster links all the codes together.

T-codes that may apply to a case involving post-intervention sepsis:

- T80.2 Infections following infusion, transfusions and therapeutic injection
- T81.4 Infection following a procedure, not elsewhere classified
- T88.0 Infection following immunization
- T82.6 Infection and inflammatory reaction due to cardiac valve prosthesis
- T82.701 Bloodstream infection and inflammatory reaction due to central venous catheter
- T82.79 Infection and inflammatory reaction due to other and unspecified cardiac and vascular devices, implants and grafts
- T83.5 Infection and inflammatory reaction due to prosthetic device, implant and graft in urinary system
- T83.6 Infection and inflammatory reaction due to prosthetic device, implant and graft in genital tract
- T84.50 Infection and inflammatory reaction due to shoulder prosthesis
- T84.51 Infection and inflammatory reaction due to elbow prosthesis
- T84.52 Infection and inflammatory reaction due to wrist, carpal and interphalangeal prosthesis
- T84.53 Infection and inflammatory reaction due to hip prosthesis
- T84.54 Infection and inflammatory reaction due to knee prosthesis
- T84.55 Infection and inflammatory reaction due to ankle and tarsal prosthesis
- T84.58 Infection and inflammatory reaction due to other joint prosthesis
- T84.59 Infection and inflammatory reaction due to unspecified joint prosthesis
- T84.60 Infection and inflammatory reaction due to internal fixation device of humerus
- T84.61 Infection and inflammatory reaction due to internal fixation device of radius and ulna
- T84.62 Infection and inflammatory reaction due to internal fixation device of bones of hand
- T84.63 Infection and inflammatory reaction due to internal fixation device of femur

- T84.64 Infection and inflammatory reaction due to internal fixation device of tibia and fibula
- T84.65 Infection and inflammatory reaction due to internal fixation device of bones of foot
- T84.68 Infection and inflammatory reaction due to internal fixation device of bones at other site
- T84.69 Infection and inflammatory reaction due to internal fixation device of bones of limb, unspecified
- T84.7 Infection and inflammatory reaction due to other internal orthopaedic prosthetic devices, implants and grafts
- T85.7 Infection and inflammatory reaction due to other internal prosthetic devices, implants and grafts

Criteria	Description
Selection criteria	Abstracts where any one of the following Diagnosis Codes A02.1, A03.9, A20.7, A21.7, A22.7, A23–, A24.1, A26.7, A28.0, A28.2, A32.7, A39.2, A39.3, A39.4, A40.–, A41.–, A42.7, A54.86, B37.7 is recorded with the same Diagnosis Cluster value as Y83–Y84 AND There is no T-code (from the list included in the Rule above) recorded within the same Diagnosis Cluster.
Data elements	Diagnosis Code, Diagnosis Cluster
Correct case examples	T81.4 (2) *Infection following a procedure, not elsewhere classified* **[Dx Cluster A]** A41.9 (3) *Sepsis, unspecified* **[Dx Cluster A]** Y83.8 (9) *Other surgical procedures as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure* **[Dx Cluster A]**
References	Canadian Coding Standards: Septicemia/Sepsis Post-Intervention Conditions Assignment of Additional Codes for Specificity

15 More Than One Outcome of Delivery (Z37) Code (D1002-148)

Rule

When a delivery occurs during an episode of care, it is mandatory to assign **one Diagnosis** Code from category Z37 *Outcome of delivery* on the mother's abstract. The outcome of delivery codes are broken down into subcategories by number of births (singleton versus multiple) and whether the outcome is a livebirth or stillbirth. Only **one** outcome of delivery code is assigned on the mother's abstract and is dependent on the circumstances of the specific case.

Criteria	Description
Selection criteria	Abstracts with more than one Z37.– Diagnosis Code.
Data element	Diagnosis Code
Correct case examples	O36.491 *Maternal care for intrauterine death, unspecified trimester, delivered, with or without mention of antepartum condition* O30.001 *Twin pregnancy, delivered, with or without mention of antepartum condition* Z37.300 *Twins, one liveborn and one stillborn, pregnancy resulting from both spontaneous ovulation and conception*
Reference	ICD-10-CA coding convention and rule

16 Neurologically Determined Death Not Assigned Diagnosis Type (3) (D1002-152)

Rule

The Diagnosis Code G93.81 *Neurologically determined death* must be assigned as a Diagnosis Type (3), mandatory, when there is documentation of brain death by a designated physician.

Criteria	Description
Selection criteria	Abstracts where Diagnosis Code G93.81 is not assigned as a Diagnosis Type (3) **Exclusion:** Diagnosis Type (0)
Data elements	Diagnosis Code, Diagnosis Type
Correct case example	G93.81 (3) *Neurologically determined death* assigned
Reference	Canadian Coding Standards: Neurologically Determined Death

17 Alcohol Poisoning External Cause Code Without Corresponding Alcohol Poisoning T-Code (D1002-163)

Rule

When one of the following alcohol poisoning external cause codes is recorded:

- X45 Accidental poisoning by and exposure to alcohol
- X65 Intentional self-poisoning by and exposure to alcohol
- Y15 Poisoning by and exposure to alcohol, undetermined intent

The corresponding alcohol poisoning T-code from category T51.– *Toxic effect of alcohol* must also be recorded.

Criteria	Description
Selection criteria	Abstracts with external cause code X45, X65 or Y15 **without** a Diagnosis Code from category T51.–
Data element	Diagnosis Code
Correct case examples	T51.9 (M) Toxic effect of alcohol, unspecified X45 (9) Accidental poisoning by and exposure to alcohol
References	ICD-10-CA Table of Drugs Coding Standard: *Adverse Reactions in Therapeutic Use Versus Poisoning*

18 High Vaginal Laceration Without Corresponding CCI Repair Code (D1002-168)

Rule

For obstetric delivered or obstetric postpartum episodes of care, the Diagnosis Code O71.401 or O71.404 is expected to also have the corresponding Intervention Code 5.PC.80.JU *Surgical repair, postpartum, of current obstetric high vaginal laceration* recorded.

Notes

- When chart review reveals a high vaginal laceration repair was performed and the corresponding CCI repair code is missing or the wrong CCI repair code was assigned, correct the case by assigning 5.PC.80.JU and, if applicable, removing the wrong CCI repair code.
- When chart review reveals there was no documentation of a high vaginal laceration and, therefore, O71.401 or O71.404 was assigned incorrectly, correct the case by removing the code O71.401 or O71.404 and coding the case per the documentation.
- When a high vaginal laceration was documented and the patient was transferred to a higher level of care to undergo the repair, no correction is necessary. This explains the suspect data.

Criteria	Description
Selection criteria	Acute care abstracts where Diagnosis Code O71.401 or O71.404 *Obstetric high vaginal laceration is recorded* **without** Intervention Code 5.PC.80.JU *Surgical repair, postpartum, of current obstetric high vaginal laceration*
Data elements	Intervention Code, Diagnosis Code
Correct case example	O71.401 *Obstetric high vaginal laceration, delivered, with or without mention of antepartum condition* AND 5.PC.80.JU *Surgical repair, postpartum, of current obstetric high vaginal laceration*

19 Vaginal Delivery Following Previous Caesarean Section in Single Delivery Episode Without Vaginal Delivery Intervention Code (D1002-169)

Rule

For a single delivery case, when the Diagnosis Code O75.701 *Vaginal delivery following previous caesarean section, delivered, with or without mention of antepartum condition* is recorded, the delivery Intervention Code must be from 5.MD.50.^^ to 5.MD.56.^^.

Note: The error can be due to incorrect assignment of a Diagnosis Code or an Intervention Code.

Criteria	Description
Selection criteria	Single delivery record (Z37.0– *Single live birth* or Z37.1– *Single stillbirth*) where Diagnosis Code O75.701 is recorded with an Intervention Code from rubric 5.MD.60.^^ *Caesarean section delivery*
Data elements	Diagnosis Code, Intervention Code
Correct case example	O75.701 (M) Vaginal delivery following previous caesarean section, delivered, with or without mention of antepartum condition Z37.000 (3) Single live birth, pregnancy resulting from both spontaneous ovulation and conception 5.MD.50.AA Manually assisted vaginal delivery (vertex), without episiotomy
Reference	Coding Standard: *Delivery With History of Previous Caesarean Section*

20 I64 *Stroke, not specified as haemorrhage or infarction* Recorded (D1002-170)

Rule

Classify a diagnosis of “stroke” or “cerebrovascular accident” as

- A **hemorrhagic stroke** when there is documentation to support there was subarachnoid hemorrhage (I60.–) or intracerebral hemorrhage (I61.–); or
- An **ischemic stroke** (I63.–) when a hemorrhagic stroke has been ruled out.

Notes

I64 *Stroke, not specified as haemorrhage or infarction* is assigned in very limited circumstances:

- Diagnostic imaging has not yet been performed (patient dies or is transferred to another facility).
- Patient is transferred in and the transfer information does not indicate the type of stroke that was diagnosed at the transferring facility.
- Your facility does not have diagnostic imaging capacity for strokes (CT scan/MRI). For facilities repatriating patients after having them transported for diagnostic imaging outside their facilities, stroke specification is required.

For the majority of cases, when the physician has recorded the final diagnosis as “stroke” or “cerebrovascular accident,” the coder’s task is to review the other source documentation, collect the specificity available and then assign the most specific stroke code possible.

In an acute care facility setting, once diagnostic imaging has been completed, the physician team treating the patient will know if the stroke they are treating is hemorrhagic or ischemic and manage the patient accordingly. When “stroke” or “CVA” is recorded as the final diagnosis by the physician/primary care provider without further specificity and the diagnostic imaging reports rule out a hemorrhagic stroke, assign a code for ischemic stroke.

Criteria	Description
Selection criteria	Acute care abstracts with Diagnosis Code I64 assigned as Diagnosis Type M, 1, 2, W, X or Y
Data elements	Diagnosis Code, Diagnosis Type
Correct case example	I63.9 (M) Cerebral infarction, unspecified
References	Coding Standard: *Strokes: Hemorrhagic, Ischemic and Unspecified* Education: Different Strokes Need Different Codes

21 Cardiac Arrest Assigned Diagnosis Type (2) Without a Cardiac Resuscitative Intervention Code (D1002-171)

Rule

When cardiac arrest is documented as occurring post-admit and a cardiac resuscitative intervention is performed, regardless of outcome, it is mandatory to assign, as applicable, I46.0 *Cardiac arrest with successful resuscitation* or I46.9 *Cardiac arrest, unspecified*. In addition, it is mandatory to assign the applicable cardiac resuscitative intervention, either 1.HZ.09.^^ *Stimulation, heart NEC* or 1.HZ.30.^^ *Resuscitation, heart NEC*.

Notes

- Documentation of cardiac arrest post-admit **without** documentation of performing cardiac resuscitation is classified to I46.9 but does not meet the definition of post-admit comorbidity. If assigned, I46.9 must be Diagnosis Type (3).
- A chart review must be completed to determine what specific correction is necessary.

Criteria	Description
Selection criteria	Abstracts where Diagnosis Code I46.0 or I46.9 is recorded as Diagnosis Type (2) **without** intervention code 1.HZ.09.^^ or 1.HZ.30.^^
Data elements	Diagnosis Code, Diagnosis Type, Intervention Code
Correct case example	I46.0 (2) Cardiac arrest with successful resuscitation 1.HZ.30.JN Resuscitation, heart NEC by external manual compression with or without concomitant ventilation
References	Canadian Coding Standards: *Cardiac Arrest* ICD-10-CA CCI

22 Confirmed or Suspected COVID-19 in Obstetrics Delivered (D1002-186)

Rule

When an obstetrics **delivered** patient is diagnosed with confirmed or suspected COVID-19, O98.5– *Other viral diseases complicating pregnancy, childbirth and the puerperium* with the sixth digit 1 or 2 must be assigned as a significant diagnosis type. An additional code to identify confirmed (U07.1) or suspected (U07.2) COVID-19 is assigned as a diagnosis type (3), mandatory.

Note: The coding standard *Complicated Pregnancy Versus Uncomplicated Pregnancy* instructs that when a condition poses a risk to maternal and/or fetal well-being, the condition is classified to a code from Chapter XV — Pregnancy, childbirth and the puerperium. COVID-19 is a condition that poses a potential risk to maternal and fetal well-being; therefore, the coding direction in this coding standard applies.

Criteria	Description
Selection criteria	Abstracts where a diagnosis code from category O10–O99 with a sixth digit of 1 or 2 as any diagnosis type **or** a diagnosis code of Z37.– as the MRDx is recorded **And** U07.1 or U07.2 is recorded **Without** O98.501 or O98.502
Data elements	Diagnosis Code
Correct case example	O98.501 (M) Other viral diseases complicating pregnancy, childbirth and the puerperium, delivered, with or without mention of antepartum condition U07.1 (3) COVID-19, virus identified Z37.000 (3) Single live birth, pregnancy resulting from both spontaneous ovulation and conception
Reference	*Canadian Coding Standards for Version 2022 ICD-10-CA and CCI — Addendum: Pandemics and Epidemics (COVID-19)* *Complicated Pregnancy Versus Uncomplicated Pregnancy*

23 Confirmed or Suspected COVID-19 in Obstetrics Undelivered (D1002-187)

Rule

When an obstetrics **undelivered** patient is diagnosed with confirmed or suspected COVID-19, O98.5– *Other viral diseases complicating pregnancy, childbirth and the puerperium* with the sixth digit 3 or 4 must be assigned as a significant diagnosis type. An additional code to identify confirmed (U07.1) or suspected (U07.2) COVID-19 is assigned as a diagnosis type (3), mandatory.

Note: The coding standard *Complicated Pregnancy Versus Uncomplicated Pregnancy* instructs that when a condition poses a risk to maternal and/or fetal well-being, the condition is classified to a code from Chapter XV — Pregnancy, childbirth and the puerperium. COVID-19 is a condition that poses a potential risk to maternal and fetal well-being; therefore, the coding direction in this coding standard applies.

Criteria	Description
Selection criteria	Abstracts where a diagnosis code from category O10–O99 with a sixth digit of 3 or 4 is recorded **And** U07.1 or U07.2 is recorded **Without** O98.503 or O98.504
Data elements	Diagnosis Code
Correct case example	O98.503 (M) Other viral diseases complicating pregnancy, childbirth and the puerperium, antepartum condition or complication U07.1 (3) COVID-19, virus identified
Reference	*Canadian Coding Standards for Version 2022 ICD-10-CA and CCI — Addendum: Pandemics and Epidemics (COVID-19)* *Complicated Pregnancy Versus Uncomplicated Pregnancy*

24 Diabetes in Pregnancy — Delivered Episode of Care (D1002-188)

Rule

When a patient is pregnant and has pre-existing diabetes mellitus or is diagnosed with gestational diabetes mellitus, it is mandatory to assign the applicable code from Chapter XV — Pregnancy, childbirth and the puerperium (O00–O99):

- O24.50– Pre-existing type 1 diabetes mellitus in pregnancy
- O24.60– Pre-existing type 2 diabetes mellitus in pregnancy
- O24.70– Pre-existing diabetes mellitus of other or unspecified type in pregnancy
- O24.80– Diabetes mellitus arising in pregnancy (gestational)

Per the coding standard *Complicated Pregnancy Versus Uncomplicated Pregnancy*, pre-existing and gestational diabetes mellitus are conditions always considered to complicate the pregnancy. When a condition complicates the pregnancy, it is classified to a code from Chapter XV — Pregnancy, childbirth and the puerperium (O00–O99) as a significant diagnosis type.

Criteria	Description
Selection criteria	Abstracts where a diagnosis code from category Z37.– AND A diagnosis code from category E10–E14 is recorded AND There is no diagnosis code from O24.50–, O24.60–, O24.70– or O24.80– with a sixth digit of 1 or 2
Data elements	Diagnosis Code
Correct case example	Delivered O75.701 (M) Vaginal delivery following previous Caesarean section, delivered, with or without mention of antepartum condition O24.501 (1) Pre-existing type 1 diabetes mellitus in pregnancy, delivered, with or without mention of antepartum condition Z37.000 (3) Single live birth, pregnancy resulting from both spontaneous ovulation and conception
References	Canadian Coding Standards: *Diabetes Mellitus* *Complicated Pregnancy Versus Uncomplicated Pregnancy*

25 Diabetes in Pregnancy — Antepartum Episode of Care (D1002-189)

Rule

When a patient is pregnant and has pre-existing diabetes mellitus or is diagnosed with gestational diabetes mellitus, it is mandatory to assign the applicable code from Chapter XV — Pregnancy, childbirth and the puerperium (O00–O99):

- O24.50– Pre-existing type 1 diabetes mellitus in pregnancy
- O24.60– Pre-existing type 2 diabetes mellitus in pregnancy
- O24.70– Pre-existing diabetes mellitus of other or unspecified type in pregnancy
- O24.80– Diabetes mellitus arising in pregnancy (gestational)

Per the coding standard *Complicated Pregnancy Versus Uncomplicated Pregnancy*, pre-existing and gestational diabetes mellitus are conditions always considered to complicate the pregnancy. When a condition complicates the pregnancy, it is classified to a code from Chapter XV — Pregnancy, childbirth and the puerperium (O00–O99) as a significant diagnosis type.

Criteria	Description
Selection criteria	Abstracts where a diagnosis code with a first digit of O and a sixth digit of 3 AND A diagnosis code from category E10–E14 is recorded AND There is no diagnosis code from O24.50–, O24.60–, O24.70– or O24.80– with a sixth digit of 3
Data elements	Diagnosis Code
Correct case example	Undelivered O47.103 (M) False labour at or after 37 completed weeks of gestation, antepartum condition or complication O24.803 (1) Diabetes mellitus arising in pregnancy (gestational), antepartum condition or complication
References	Canadian Coding Standards: *Diabetes Mellitus* *Complicated Pregnancy Versus Uncomplicated Pregnancy*

26 Incorrect J44.– (COPD) Code Assigned With Lower Respiratory Infection Code (D1002-194)

Rule

When a patient is diagnosed with acute bronchiolitis (J21.–), acute bronchitis (J20.–) or pneumonia in any form (J10.0, J11.0, J12.–, J13, J14, J15.–, J16.–, J18.–) and also has chronic obstructive pulmonary disease (COPD), the COPD is classified to J44.0 *Chronic obstructive pulmonary disease with acute lower respiratory infection*.

Criteria	Description
Selection criteria	Abstracts with Diagnosis Code J44.1, J44.8 or J44.9 AND either J10.0, J11.0, J12.–, J13, J14, J15.–, J16.–, J18.–, J20.– or J21.–
Data elements	Diagnosis Code
Correct case example	J44.0 (M) Chronic obstructive pulmonary disease with acute lower respiratory infection J18.9 (1) Pneumonia, unspecified
References	Canadian Coding Standards: *Pneumonia in Patients With Chronic Obstructive Pulmonary Disease (COPD)* ICD-10-CA alphabetical index

27 U07.4 *Post COVID-19 condition* Assigned Diagnosis Type M, 1, 2, W, X, Y (D1004-185)

Rule

When U07.4 *Post COVID-19 condition* is assigned on an abstract, the diagnosis type must be (3).

Note: U07.4 *Post COVID-19 condition* is to be used in multiple coding to identify a case in which the physician/primary care provider documented that a condition or symptom has a relationship or association with past COVID-19.

Criteria	Description
Selection criteria	Abstracts where U07.4 is assigned diagnosis type M, 1, 2, W, X, Y
Data elements	Diagnosis Type, Diagnosis Code
Correct case example	U07.4 is assigned diagnosis type (3).
Reference	*Canadian Coding Standards for Version 2022 ICD-10-CA and CCI — Addendum: Pandemics and Epidemics (COVID-19)*

28 R57.2 *Septic shock* as MRDx (D1004-193)

Rule

R57.2 *Septic shock* must never be the MRDx.

Criteria	Description
Selection criteria	Abstracts where R57.2 is assigned MRDx
Data elements	Diagnosis Type, Diagnosis Code
Correct case example	A41.9 (M) Sepsis, unspecified R57.2 (1) Septic shock
References	Canadian Coding Standards: *Use Additional Code/Code Separately Instructions*; *Underlying Symptoms or Conditions*; *Septicemia/Sepsis*; *Systemic Inflammatory Response Syndrome (SIRS)*

29 Repair High Vaginal Laceration Without a Corresponding Diagnosis Code (D1102-111)

Rule

For obstetrics delivered or obstetric postpartum episodes of care, the Intervention Code 5.PC.80.JU *Surgical repair, postpartum, of current obstetric high vaginal laceration* must have a corresponding Diagnosis Code of O71.401 or O71.404 recorded on the same abstract.

The error can be due to

- An Intervention Code assigned correctly but the Diagnosis Code is missing, OR
- An Intervention Code assigned incorrectly

Criteria	Description
Selection criteria	Intervention Code 5.PC.80.JU *Surgical repair, postpartum, of current obstetric high vaginal laceration* is recorded **without** Diagnosis Code O71.401 or O71.404 *Obstetric high vaginal laceration* Exclude abortion abstracts with a Diagnosis Code from O08.6–
Data elements	Intervention Code, Diagnosis Code
Correct case examples	5.PC.80.JU *Surgical repair, postpartum, of current obstetric high vaginal laceration* AND O71.401 *Obstetric high vaginal laceration, delivered, with or without mention of antepartum condition*

30 Cementless Hip/Knee Replacement CCI Codes and the Presence of Cement Sticker (D1102-180)

Rule

When a cement product number is present in Group 20 Field 05, the 10th digit of the corresponding hip/knee replacement CCI code must be N or Q — with synthetic material.

OR

When the 10th digit of the hip/knee replacement CCI code is N or Q, a cement product number must be present in Group 20 Field 05.

Note: This test also checks that a cement sticker has not been overlooked. When a chart review reveals that cement was not used during the intervention, no correction is necessary.

Criteria	Description
Selection criteria	If a Cement — Product Number is present and the 10th digit of the corresponding hip/knee replacement CCI codes (1.VA.53.^^, 1.SQ.53.^^, 1.VG.53.^^, 1.VP.53.^^) is neither N nor Q OR If the 10th digit of the corresponding hip/knee replacement CCI codes (1.VA.53.^^, 1.SQ.53.^^, 1.VG.53.^^, 1.VP.53.^^) is N or Q and a Cement — Product Number is missing
Data elements	Intervention Code, Cement — Product Number
Correct case example	1.VG.53.LA-PM-N *Implantation of internal device, knee joint with synthetic material (e.g., bone paste, cement) single component prosthetic device* with 1 cement sticker product number 6191-0-001 in Group 20 Field 05.
Reference	CCI v2022

31 Incorrect Status Attribute With 3.IP.10.VX (D1103-172)

Rule

Status Attribute 0 (Not applicable) must not be assigned with 3.IP.10.VX *X-ray, heart with coronary arteries, of left heart structures using percutaneous transluminal arterial (retrograde) approach*. When coronary angiography is performed, the Status Attribute must identify whether the coronary angiography was

- Diagnostic [DX]
- Intraoperative [I]
- Unknown [whether diagnostic or intraoperative] [UN]

Note: The Status Attribute 0 (Not applicable) [i.e., ventriculogram] is for use only with 3.IP.10.VC *X-ray, heart with coronary arteries of right heart structures using percutaneous transluminal venous (antegrade) approach* and/or 3.IP.10.VZ *X-ray, heart with coronary arteries of left heart structures using percutaneous transluminal transseptal approach.*

Criteria	Description
Selection criteria	Abstracts where Intervention Code 3.IP.10.VX is recorded AND Status Attribute is 0.
Data elements	Intervention Code, Status Attribute
Correct case example	3.IP.10.VX *X-ray, heart with coronary arteries, of left heart structures using percutaneous transluminal arterial (retrograde) approach* Status Attribute: DX (Diagnostic)
Reference	CCI Status Attribute pop-up note

32 Incorrect Status Attribute With 3.IP.10.VC and/or 3.IP.10.VZ (D1103-173)

Rule

The following status attributes **must not** be assigned with 3.IP.10.VC *X-ray, heart with coronary arteries of right heart structures using percutaneous transluminal venous (antegrade) approach* and/or 3.IP.10.VZ *X-ray, heart with coronary arteries of left heart structures using percutaneous transluminal transseptal approach:*

- Diagnostic [DX]
- Intraoperative [I]
- Unknown [whether diagnostic or intraoperative] [UN]

Note: Status Attribute values DX, I and UN are for use only with 3.IP.10.VX (coronary angiography).

Criteria	Description
Selection criteria	Abstracts where Intervention Code 3.IP.10.VC and/or 3.IP.10.VZ is recorded AND Status Attribute is DX, I or UN.
Data elements	Intervention Code, Status Attribute
Correct case example	3.IP.10.VC *X-ray, heart with coronary arteries of right heart structures using percutaneous transluminal venous (antegrade) approach* Status Attribute: 0 (Not applicable)
Reference	CCI Status Attribute pop-up note

33 Incorrect Location Attribute With 3.IP.10.VX (D1104-82)

Rule

Location Attribute 0 (Not applicable) must not be assigned with 3.IP.10.VX *X-ray, heart with coronary arteries, of left heart structures using percutaneous transluminal arterial (retrograde) approach*. Coronary angiography is always performed via an arterial access and as such the Location Attribute must represent arterial access:

- Combined [for chronic total occlusion] [CB]
- Femoral artery (left) (right) [FY]
- Left arm artery [e.g., radial, brachial] [LY]
- Right arm artery [e.g., radial, brachial] [RY]
- Unknown artery [U]

Note: The Location Attribute 0 (not applicable) [i.e., venous approach] is for use only with 3.IP.10.VC *X-ray, heart with coronary arteries of right heart structures using percutaneous transluminal venous (antegrade) approach* and/or 3.IP.10.VZ *X-ray, heart with coronary arteries of left heart structures using percutaneous transluminal transseptal approach*.

Criteria	Description
Selection criteria	Abstracts where Intervention Code 3.IP.10.VX is recorded AND Location Attribute is 0.
Data elements	Intervention Code, Location Attribute
Correct case example	3.IP.10.VX *X-ray, heart with coronary arteries, of left heart structures using percutaneous transluminal arterial (retrograde) approach* Location Attribute: FY (Femoral artery (left) (right))
Reference	CCI Location Attribute pop-up note

34 Incorrect Location Attribute With 3.IP.10.VC and/or 3.IP.10.VZ (D1104-174)

Rule

The following location attributes representing arterial access **must not** be assigned with 3.IP.10.VC *X-ray, heart with coronary arteries of right heart structures using percutaneous transluminal venous (antegrade) approach* and/or 3.IP.10.VZ *X-ray, heart with coronary arteries of left heart structures using percutaneous transluminal transseptal approach:*

- Combined [for chronic total occlusion] [CB]
- Femoral artery (left) (right) [FY]
- Left arm artery [e.g. radial, brachial] [LY]
- Right arm artery [e.g. radial, brachial] [RY]
- Unknown artery [U]

Note: Location Attribute values CB, FY, LY, RY and U are for use only with 3.IP.10.VX (coronary angiography).

Criteria	Description
Selection criteria	Abstracts where Intervention Code 3.IP.10.VC and/or 3.IP.10.VZ is recorded AND Location Attribute is CB, FY, LY, RY or U.
Data elements	Intervention Code, Location Attribute
Correct case example	3.IP.10.VC *X-ray, heart with coronary arteries of right heart structures using percutaneous transluminal venous (antegrade) approach* Location Attribute: 0 (Not applicable)
Reference	CCI Location Attribute pop-up note

35 Extent Attribute UN (Unknown) With Hip Replacement (D1105-86)

Rule

Select the Extent Attribute UN (Unknown) only when there is no information to select a specific value from the extent attribute options. UN (Unknown) should be used rarely as the documentation will identify the component used with a hip replacement procedure 1.VA.53.^^ *Implantation of internal device, hip joint*.

Criteria	Description
Selection criteria	Abstracts where the Intervention Code from rubric 1.VA.53.^^ is recorded with the Extent Attribute UN Exclude hip replacement procedures where Out-of-Hospital Indicator is Y (Yes) or Status Attribute is A (Abandoned)
Data elements	Intervention Code, Extent Attribute, Status Attribute, Out-of-Hospital Indicator
Correct case examples	1.VA.53.LA-PN-N *Implantation of internal device, hip joint, open approach (direct lateral, posterolateral, posterior, transgluteal) using synthetic material (e.g., bone paste, cement) dual component prosthetic device [femoral with acetabular]* Status Attribute: R (revision) Location: L (left) Extent Attribute: FH (Modular ball (with or without modular neck) with stem remaining in situ [this component value requires Status value R = Revision])

36 Incorrect Value of Extent Attribute for Hip Arthroplasty Codes 1.VA.53.^^ (D1105-166)

Rule

When recording hip arthroplasty with implantation prosthetic device codes 1.VA.53.^^, ensure that the value of the extent attribute matches the corresponding Intervention Code.

- For a hip arthroplasty involving both femoral with acetabular components, the Intervention Code from rubric 1.VA.53.LA-PN-^ or 1.VA.53.LL-PN-^ should have extent attribute FH, MU, MO, RE or UN.
- For a hip arthroplasty involving a femoral component only, the Intervention Code from rubric 1.VA.53.LA-PM-^ or 1.VA.53.LL-PM-^ should have extent attribute FH, M1, M2, MO, RE or UN.
- For a hip arthroplasty involving a cement spacer, the Intervention Code 1.VA.53.LA-SL-N or 1.VA.53.LL-SL-N should have extent attribute CS.

Note: To generate a correct procedure type for a primary hip arthroplasty for the Canadian Joint Replacement Registry (CJRR), it is strongly recommended coders check the clinical documentation to avoid assigning extent attribute UN (Unknown) for hip arthroplasty with dual or single component.

Criteria	Description
Selection criteria	Abstracts where An Intervention Code from rubric 1.VA.53.LA-PN-^ or 1.VA.53.LL-PN-^ is recorded without one of following extent attributes: FH, MU, MO, RE or UN OR An Intervention Code from rubric 1.VA.53.LA-PM-^ or 1.VA.53.LL-PM-^ is recorded without one of following extent attributes: FH, M1, M2, MO, RE or UN OR An Intervention Code 1.VA.53.LA-SL-N or 1.VA.53.LL-SL-N is recorded without extent attribute CS
Data elements	Intervention Code, Extent Attribute

Criteria	Description
Correct case examples	1.VA.53.LA-PN-N *Implantation of internal device, hip joint open approach (direct lateral, posterolateral, posterior, transgluteal) using synthetic material (e.g., bone paste, cement) dual component prosthetic device [femoral with acetabular]* Status Attribute: P (Primary) Location: L (left) Extent Attribute: MU (Modular total arthroplasty [Includes: Total hip replacement (femoral and acetabular)]) 1.VA.53.LA-PM-N *Implantation of internal device, hip joint open approach (direct lateral, posterolateral, posterior, transgluteal) using synthetic material (e.g., bone paste, cement) single component prosthetic device [femoral]* Status Attribute: P (Primary) Location: L (left) Extent Attribute: M2 (Modular hemiarthroplasty, bipolar femoral component [Includes: Femoral head with larger outer head (ball in ball) with a plastic acetabular liner for partial hip replacement; articulates with the native acetabulum]) 1.VA.53.LA-SL-N *Implantation of internal device, hip joint open approach (direct lateral, posterolateral, posterior, transgluteal) using synthetic material (e.g., bone paste, cement) cement spacer* Status Attribute: R (Revision) Location: L (left) Extent Attribute: CS (Cement spacer)
Reference	CCI v2022

37 Three or More OOH Intervention Episodes in One Day (D1113-35)

Rule

Interventions are captured in intervention episodes. An intervention episode represents a patient's visit to a physical location where 1 or more interventions may take place. When more than one CCI code is required to capture the interventions performed in a single intervention episode, the Intervention Episode Start Date will be recorded once on the first line of the abstract. Every time an Intervention Episode Start Date is recorded on the abstract, a new intervention episode is derived.

The Out-of-Hospital (OOH) Indicator field indicates that an intervention episode was performed in the day surgery or other ambulatory care setting of another facility during the current inpatient stay in the reporting facility.

This data quality test identifies abstracts with potential errors of over-recording Intervention Episode Start Date for multiple OOH interventions in a single episode.

Criteria	Description
Selection criteria	Abstracts where the OOH indicator is Y and the same Intervention Episode Start Date is recorded for 3 or more OOH intervention episodes.
Data elements	OOH Indicator, Intervention Episode Start Date
Correct case example	Only 1 Intervention Episode Start Date is recorded for OOH interventions performed in a single intervention episode.
Reference	DAD Abstracting Manual: Group 11 — Interventions

38 Legal Status Upon Arrival to ED Must Not Be Blank for Non-NACRS L3 ED Facilities (D1515-177)

Rule

Legal Status Upon Arrival to ED is mandatory for facilities not also reporting NACRS Level 3 ED data. This field **must not be blank** if the patient was admitted via the ED.

Note: This test is applicable to facilities without any NACRS Level 3 ED records for the current fiscal year. Please disregard this test if your facility is a NACRS Level 3 ED facility. Once there are 1 or more NACRS Level 3 ED records from your facility, this test will no longer be applied and the current flagged records will not be included in future reports. This test does not apply to facilities in Ontario, Alberta and Yukon.

Criteria	Description
Selection criteria	Abstracts from acute inpatient institutions that do not also report NACRS Level 3 data: Where • Entry Code is E (Emergency) AND • Main Patient Service or Service Transfer Service is 64 (Psychiatry) or 65 (Pediatric Psychiatry) AND • Legal Status Upon Arrival to ED is blank **Exclusions:** • Facilities submitting NACRS Level 3 ED data
Data elements	Entry Code, Main Patient Service, Service Transfer Service, Legal Status Upon Arrival to ED
Correct case example	Entry Code E (Emergency) and Main Patient Service 64 (Psychiatry) were recorded on an acute inpatient abstract. The submitting institution does not submit NACRS Level 3 ED data. Legal Status Upon Arrival to ED was recorded as 10 (Voluntary).
Reference	• DAD Abstracting Manual: Group 04 – Admission, Field 06 Entry Code, Group 07 — Patient Service, Field 01 Main Patient Service, Group 08 — Service Transfer, Field 01 Service Transfer Service, Group 15 — Mental Health Indicators, Field 15 Legal Status Upon Arrival to ED • Job Aid — Frequency of Restraint Use and Legal Status Upon Arrival to ED in the DAD

39 Legal Status Upon Arrival to ED Must Be Blank for NACRS L3 ED Facilities (D1515-178)

Rule

Legal Status Upon Arrival to ED **must be blank** for facilities also reporting NACRS Level 3 ED data if the patient was admitted via the ED. An entry in this field represents unnecessary data collection and increased coder burden. Data can be obtained via linkage to the corresponding NACRS record.

Note: This test is applicable to all facilities in Ontario, Alberta and Yukon. For other provinces and territories, this test is applicable to all facilities with 1 or more NACRS Level 3 ED records for the current fiscal year.

Criteria	Description
Selection criteria	Abstracts from acute inpatient institutions that report NACRS Level 3 ED data: Where • Entry Code is E (Emergency) AND • Main Patient Service or Service Transfer Service is 64 (Psychiatry) or 65 (Pediatric Psychiatry) AND • Legal Status Upon Arrival to ED is not blank
Data elements	Entry Code, Main Patient Service, Service Transfer Service, Legal Status Upon Arrival to ED
Correct case example	Entry Code E (Emergency) and Main Patient Service 64 (Psychiatry) were recorded on an acute inpatient abstract. The submitting institution does submit NACRS Level 3 ED data. Legal Status Upon Arrival to ED data element remains blank.
Reference	• DAD Abstracting Manual: Group 04 - Admission, Field 06 Entry Code, Group 07 — Patient Service, Field 01 Main Patient Service, Group 08 — Service Transfer, Field 01 Service Transfer Service, Group 15 — Mental Health Indicators, Field 15 Legal Status Upon Arrival to ED • Job Aid — Frequency of Restraint Use and Legal Status Upon Arrival to ED in the DAD

40 Legal Status Upon Arrival to ED Without Entry Code E — Emergency (D1515-179)

Rule

Legal Status Upon Arrival to ED **must be blank** if the patient was not admitted via the ED.

Criteria	Description
Selection criteria	Abstracts from acute inpatient: Where • Entry Code is not E (Emergency) AND • Main Patient Service or Service Transfer Service is 64 (Psychiatry) or 65 (Pediatric Psychiatry) AND • Legal Status Upon Arrival to ED is not blank
Data elements	Entry Code, Main Patient Service, Service Transfer Service, Legal Status Upon Arrival to ED
Correct case example	Main Patient Service 64 (Psychiatry) is recorded on an acute inpatient abstract. The Entry Code is D (Direct). The Legal Status Upon Arrival to ED data element remains blank.
Reference	• DAD Abstracting Manual: Group 04 Admission, Field 06 Entry Code, Group 07 — Patient Service, Field 01 Main Patient Service, Group 08 — Service Transfer, Field 01 Service Transfer Service, Group 15 — Mental Health Indicators, Field 15 Legal Status Upon Arrival to ED • Job Aid — Frequency of Restraint Use and Legal Status Upon Arrival to ED in the DAD

41 Type of Restraint N Recorded With Type of Restraint M, C, P or S (D1517-190)

Rule

It is mandatory to assign the Type of Restraint field for abstracts assigned Patient Service 64/65 (Psychiatry/Paediatric Psychiatry). Do not record Type of Restraint value N (None) when Type of Restraint values M, C, P or S are also assigned (M — Mechanical restraint, C — Chair, P — Physical or manual restraint by staff, S — Seclusion room). Type of Restraint value N (None) is assigned to cases where no restraint use is documented.

Criteria	Description
Selection criteria	Abstracts where Type of Restraint N is recorded with Type of Restraint M, C, P or S.
Data elements	Type of Restraint
Correct case example	Type of Restraint M (Mechanical restraint) is recorded without Type of Restraint N (None).
Reference	DAD Abstracting Manual: Group 15 — Mental Health Indicators, Field 17 — Type of Restraint

42 Type of Restraint M, C, P, S or N Recorded More Than Once (D1517-191)

Rule

Record Type of Restraint for all restraint devices used during the first 3 days of the patient stay on Patient Service 64 or 65 (Psychiatry/Paediatric Psychiatry). Record all devices that were used, but record each device only once.

Criteria	Description
Selection criteria	Abstracts where Type of Restraint M, C, P, S or N is recorded more than once.
Data elements	Type of Restraint
Correct case example	Mechanical restraint is used twice during the first 3 days of the patient stay on Patient Service 64 or 65. Type of Restraint value M (Mechanical restraint) is recorded only once.
Reference	DAD Abstracting Manual: Group 15 — Mental Health Indicators, Field 17 — Type of Restraint

43 Frequency of Restraint Use N Recorded With Type of Restraint M, C, P or S (D1518-192)

Rule

The Frequency of Restraint Use field is value N (None) for cases assigned Patient Service 64 (Psychiatry) or 65 (Paediatric Psychiatry) and no restraint use is documented. Assign Frequency of Restraint Use value N (None) only when Type of Restraint value N (None) is assigned.

- Do not record Frequency of Restraint Use value N (None) in combination with Type of Restraint values M, C, P or S (M — Mechanical restraint, C — Chair, P — Physical or manual restraint by staff, S — Seclusion room).
- Assign Frequency of Restraint Use values C, D, I or U (C — Constant, D — Day or Night only, I — Intermittent, U — Unknown/not documented) when Type of Restraint values M, C, P or S are assigned.

Criteria	Description
Selection criteria	Abstracts where Frequency of Restraint Use N is recorded with Type of Restraint M, C, P or S.
Data elements	Type of Restraint, Frequency of Restraint Use
Correct case example	Type of Restraint M (Mechanical restraint) and Frequency of Restraint Use I (Intermittent — used occasionally) are recorded.
Reference	DAD Abstracting Manual: Group 15 — Mental Health Indicators, Field 18 — Frequency of Restraint Use

44 Project 340 — Project Not Completed When an "Applicable Condition" Code Is Recorded (D1618-99)

Rule

Special Project 340 Canadian Stroke Strategy Performance Improvement is expected to be completed for all patients who have been diagnosed with an acute/current stroke, and certain other conditions that from an ICD-10-CA classification perspective are not classified as a hemorrhagic, ischemic or unspecified stroke. The other conditions included in this project are: transient ischemic attack (TIA), transient retinal artery occlusion, intracranial and intraspinal phlebitis and thrombophlebitis, nonpyogenic thrombosis of intracranial venous system and central retinal artery occlusion.

Note: The term **"applicable condition"** is used throughout the stroke projects documentation to refer to the ICD-10-CA codes/conditions included.

Inclusion criteria ICD-10-CA code list:

- I60.– *Subarachnoid haemorrhage*
- I61.– *Intracerebral haemorrhage*
- I63.– *Cerebral infarction*
- I64 *Stroke, not specified as haemorrhage or infarction*
- G08 *Intracranial and intraspinal phlebitis and thrombophlebitis*
- I67.6 *Nonpyogenic thrombosis of intracranial venous system*
- H34.0 *Transient retinal artery occlusion*
- H34.1 *Central retinal artery occlusion*
- G45.– *Transient cerebral ischaemic attacks and related syndromes;* (**excluding** *G45.4 Transient global amnesia*)
- O22.5– Cerebral venous thrombosis in pregnancy
- O87.3– Cerebral venous thrombosis in puerperium

Note: There may be cases flagged with this test that do not require completion of project 340.

Criteria	Description
Selection criteria	Acute care abstracts from MB, NL, NS or ON where Project Number 340 **is not** completed when a Diagnosis Code for one of the "applicable conditions" is recorded. **Exclusions:** • Patients younger than 1 • Abstracts without any acute days
Data elements	Diagnosis Code, Diagnosis Type, Project Number
Reference	Group 16 — Special Projects documentation is now accessible through the DAD/NACRS Abstracting Manual application on CIHI's website.

45 Project 340 — Not Applicable, Unknown or Invalid Value for Prescription for Antithrombotic Medication at Discharge (D1618-103)

Rule

When Special Project 340 Canadian Stroke Strategy Performance Improvement is recorded, it is mandatory to complete Field 12 Prescription for Antithrombotic Medication at Discharge. This field captures whether the patient received a prescription for antithrombotic medication at discharge.

Note: A high percent of abstracts with 8 (not applicable), 9 (unknown) or invalid value may indicate a need to investigate practices around the capture of prescription for antithrombotic medication at discharge.

Criteria	Description
Selection criteria	An “applicable condition” is recorded AND Field 12 Prescription for Antithrombotic Medication at Discharge is 8 (not applicable), 9 (unknown) or is invalid AND Discharge Disposition is not 72 (Died in Facility), 73 (Medical Assistance in Dying [MAID]) or 74 (Suicide in Facility) **Exclusion:** Abstracts where the “applicable condition” is a hemorrhagic stroke (I60 or I61)
Data elements	Project Number, Field 12
Reference	Group 16 — Special Projects documentation is now accessible through the DAD/NACRS Abstracting Manual application on CIHI’s website.

46 Project 340 — Missing, Invalid or Unknown Value for Date and Time of Acute Thrombolysis Administration When Administration of Acute Thrombolysis Is Y or P (D1618-121)

Rule

When Special Project 340 Special Project Canadian Stroke Strategy Performance Improvement is completed, it is mandatory to record Fields 04 to 11 Date and Time of Acute Thrombolysis Administration when Field 03 Administration of Acute Thrombolysis is Y (Yes) or P (Yes, Prior). This field captures the specific date and time that a patient received acute thrombolysis. The start date/time for administration of the medication should be recorded in these fields. The year is not being recorded.

Note: A high percent of abstracts with missing (blank), invalid or 99 (unknown) date and time may indicate a need to investigate documentation practices.

Criteria	Description
Selection criteria	An “applicable condition” is recorded AND Field 03 Administration of Acute Thrombolysis is Y (yes) or P (yes, prior) AND 1 or more of the following fields are blank, unknown or invalid: • Fields 04–05 (Month): is blank, is 99 (unknown) or is not 01–12 • Fields 06–07 (Day): is blank, is 99 (unknown) or is not 01–31 • Fields 08–09 (Hour): is blank, is 99 (unknown) or is not 00–23 • Fields 10–11 (Minutes): is blank, is 99 (unknown) or is not 00–59 **Exclusions:** • When acute thrombolysis was given for a condition other than an “applicable condition” • Hemorrhagic strokes (I60 or I61)
Data elements	Project Number, Fields 03 to 11
Reference	Group 16 — Special Projects documentation is now accessible through the DAD/NACRS Abstracting Manual application on CIHI’s website.

47 Project 340 — Invalid or Unknown Value for Stroke Symptom Onset Date and Time (D1618-123)

Rule

When Special Project 340 Canadian Stroke Strategy Performance Improvement is completed, it is mandatory to record Fields 13 to 24 Stroke Symptom Onset Date and Time. This field captures the date and time that the patient first started to experience stroke symptoms for the "applicable condition," regardless of the location of the patient at the time of symptom onset. In most cases, this information is known by the patient or a witness to the event.

Note: A high percent of abstracts with invalid or unknown date and time may indicate a need to investigate practices around the capture of stroke symptom onset date and time.

Criteria	Description
Selection criteria	An "applicable condition" is recorded AND 1 or more of the following fields are unknown or invalid: • Fields 13–16 (Year): is 9999 (unknown) or is not a valid 4-character code of less than or equal to current calendar year. • Fields 17–18 (Month): is 99 (unknown) or is not 01–12. • Fields 19–20 (Day): is 99 (unknown) or is not 01–31. • Fields 21–22 (Hour): is 99 (unknown) or is not 00–23. • Fields 23–24 (Minutes): is 99 (unknown) or is not 00–59.
Data elements	Project Number, Fields 13 to 24
Reference	Group 16 — Special Projects documentation is now accessible through the DAD/NACRS Abstracting Manual application on CIHI's website.

48 Project 740 — Project Not Completed When an “Applicable Condition” Code Is Recorded (D1619-137)

Rule

Special Project 740 AlphaFIM® is mandatory to report for all DAD acute inpatient admissions of patients 18 years and older with an acute/current stroke, and certain other conditions that from an ICD-10-CA classification perspective are not classified as a hemorrhagic, ischemic or unspecified stroke. The other conditions included in this project are transient ischemic attack (TIA), intracranial and intraspinal phlebitis and thrombophlebitis and nonpyogenic thrombosis of intracranial venous system.

Note: The term **“applicable condition”** is used throughout the stroke projects documentation to refer to the ICD-10-CA codes/conditions included in in the different projects.

Inclusion criteria ICD-10-CA code list:

- I60.– *Subarachnoid haemorrhage*
- I61.– *Intracerebral haemorrhage*
- I63.– *Cerebral infarction*
- I64.– *Stroke, not specified as haemorrhage or infarction*
- I67.6 *Nonpyogenic thrombosis of intracranial venous system*
- G08 *Intracranial and intraspinal phlebitis and thrombophlebitis*
- G45.– *Transient cerebral ischaemic attacks and related syndromes* (**excluding** G45.4 *Transient global amnesia*)
- O22.5– *Cerebral venous thrombosis in pregnancy*
- O87.3– *Cerebral venous thrombosis in puerperium*

Notes:

- Special Project 740 is not completed for the codes H34.0– *Transient retinal artery occlusion* (another valid type of TIA) and H34.1– *Central retinal artery occlusion*.
- There may be cases flagged with this test that do not require completion of Project 740.

Criteria	Description
Selection criteria	Acute care abstracts from Ontario and from the following Newfoundland and Labrador facilities — Health Sciences Centre 00215, St. Clare's Mercy Hospital 00214, Dr. G.B. Cross Memorial Hospital 00064, Burin Peninsula Health Care Centre 00065, Carbonear General Hospital 00060, Central Newfoundland Regional Health Centre 00038, James Paton Memorial Hospital 00049 and Western Memorial Regional Hospital 00004 — where Project 740 is not completed when a Diagnosis Code for an "applicable condition" (see code list above) is recorded and the patient is 18 years or older **Exclusions:** • Abstracts where Z51.5– *Palliative care* is assigned • Abstracts without any acute days
Data elements	Diagnosis Code, Project Number
Reference	Group 16 — Special Projects documentation is now accessible through the DAD/NACRS Abstracting Manual application on CIHI's website.

49 Project 740 — Invalid Value for Documentation of AlphaFIM® Scores (D1619-138)

Rule

When Project 740 AlphaFIM® is completed, it is mandatory to record Field 01 Documentation of AlphaFIM® Scores.

This field captures whether AlphaFIM® scores Projected FIM® — 13 Raw Motor Rating and/or the Projected FIM® — 5 Raw Cognitive Rating were documented for patients with an “applicable condition.”

Criteria	Description
Selection criteria	An “applicable condition” is recorded AND Field 01 Documentation of AlphaFIM® Scores is not equal to Y or N
Data elements	Project Number, Field 01
Reference	Group 16 — Special Projects documentation is now accessible through the DAD/NACRS Abstracting Manual application on CIHI’s website.

50 Project 740 — Invalid Value for AlphaFIM® Completion Date When Documentation of AlphaFIM® Scores Is Y (D1619-139)

Rule

When Special Project 740 AlphaFIM® is completed and Field 01 Documentation of AlphaFIM® is Y, Fields 02–09 AlphaFIM® Completion Date must be a valid date or 99999999 (unknown).

This field captures the first date when AlphaFIM® scores Projected FIM® — 13 Raw Motor Rating and/or Projected FIM® — 5 Raw Cognitive Rating were documented.

Criteria	Description
Selection criteria	An ”applicable condition” is recorded AND Field 01 Documentation of AlphaFIM® Scores is Y AND 1 or more of the following fields are invalid: • Fields 02–05 (Year): not a valid calendar year or not 9999 (unknown) • Fields 06–07 (Month): not a valid calendar month or not 99 (unknown) • Fields 08–09 (Day): not a valid calendar day or not 99 (unknown)
Data elements	Project Number, Field 01, Fields 02–09
Reference	Group 16 — Special Projects documentation is now accessible through the DAD/NACRS Abstracting Manual application on CIHI’s website.

51 Project 740 — AlphaFIM® Completion Date Not Between Admission Date and Discharge Date (D1619-141)

Rule

When Special Project 740 AlphaFIM® is completed and Field 01 Documentation of AlphaFIM® is Y and Admission Date, Discharge Date and Fields 02–09 AlphaFIM® Completion Date are valid dates, Fields 02–09 must be greater than or equal to the Admission Date and less than or equal to the Discharge Date.

This field captures the first date when AlphaFIM® scores Projected FIM® — 13 Raw Motor Rating and/or the Projected FIM® — 5 Raw Cognitive Rating were documented.

Criteria	Description
Selection criteria	An “applicable condition” is recorded AND Field 01 Documentation of AlphaFIM® Scores is Y AND Admission Date, Discharge Date and Fields 02–09 AlphaFIM® Completion Date are valid dates (not blank or 99999999 (unknown)) AND Fields 02–09 AlphaFIM® Completion Date is not greater than or equal to the Admission Date and less than or equal to the Discharge Date
Data elements	Project Number, Field 01, Fields 02–09, Admission Date, Discharge Date
Reference	Group 16 — Special Projects documentation is now accessible through the DAD/NACRS Abstracting Manual application on CIHI’s website.

52 Project 740 — Invalid Value for Projected FIM® — 13 Raw Motor Rating (D1619-142)

Rule

When Special Project 740 AlphaFIM® is completed and Field 01 Documentation of AlphaFIM® is Y, Fields 10–11 Projected FIM® — 13 Raw Motor Rating must be greater than or equal to 13 and less than or equal to 81 or equal to 99 (unknown).

This data element captures the total score documented for a patient's motor functional status from among the relevant tasks of eating, grooming, transfers, locomotion and bowel management.

Criteria	Description
Selection criteria	An "applicable condition" is recorded AND Field 01 Documentation of AlphaFIM® Scores is equal to Y AND Fields 10–11 Projected FIM® — 13 Raw Motor Rating is not greater than or equal to 13 and less than or equal to 81 or equal to unknown value 99
Data elements	Project Number, Field 01, Fields 10–11
Reference	Group 16 — Special Projects documentation is now accessible through the DAD/NACRS Abstracting Manual application on CIHI's website.

53 Project 740 — Invalid Value for Projected FIM® — 5 Raw Cognitive Rating (D1619-144)

Rule

When Special Project 740 AlphaFIM® is completed and Field 01 Documentation of AlphaFIM® is Y, Fields 12–13 Projected FIM® — 5 Raw Cognitive Rating must be greater than or equal to 7 and less than or equal to 35 or equal to 99 (unknown).

This data element captures the total score documented for a patient's cognitive functional status for expression and memory.

Criteria	Description
Selection criteria	An "applicable condition" is recorded AND Field 01 Documentation of AlphaFIM® Scores is Y AND Fields 12–13 Projected FIM® — 5 Raw Cognitive Rating is not greater than or equal to 7 and less than or equal to 35 or equal to 99 (unknown)
Data elements	Project Number, Field 01, Fields 12–13
Reference	Group 16 — Special Projects documentation is now accessible through the DAD/NACRS Abstracting Manual application on CIHI's website.

54 Project 440 — Invalid Value for CTA, CTP or MRA Scan Performed Prior to Start of Endovascular Thrombectomy Intervention (D1620-155)

Rule

When Special Project 440 Endovascular Thrombectomy is recorded, it is mandatory to record Field 01 CTA, CTP or MRA Scan Performed Prior to Start of Endovascular Thrombectomy Intervention.

This data element captures where the last (most recent) computed tomography angiography (CTA), computed tomography perfusion (CTP) or magnetic resonance angiogram (MRA) scan that qualified the patient for endovascular thrombectomy was performed.

Criteria	Description
Selection criteria	Project Number 440 is completed And Field 01 CTA, CTP or MRA Scan Performed Prior to Start of Endovascular Thrombectomy Intervention is not equal to P (Yes, prior), Y (Yes), N (No) or 8 (Not applicable)
Data elements	Project Number, Field 01
Reference	Group 16 — Special Projects documentation is now accessible through the DAD/NACRS Abstracting Manual application on CIHI's website.

55 Project 440 — Invalid Value for Date and Time of Qualifying Scan Prior to Endovascular Thrombectomy Intervention When CTA, CTP or MRA Scan Performed Prior to Start of Endovascular Thrombectomy Intervention Is P or Y (D1620-156)

Rule

When Special Project 440 Endovascular Thrombectomy is recorded and Field 01 CTA, CTP or MRA Scan Performed Prior to Start of Endovascular Thrombectomy Intervention is recorded with P (Yes, prior) or Y (Yes), Fields 02–09 Date and Time of Qualifying Scan Prior to Endovascular Thrombectomy Intervention must be a valid date and time or 99999999 (unknown).

This data element captures the date and time of the last CTA, CTP or MRA scan used to decide whether to attempt an endovascular thrombectomy. This is the date/time of the first slice image, which is electronically stamped on the images when the CTA, CTP or MRA scan is started.

Criteria	Description
Selection criteria	Project Number 440 is recorded And Field 01 CTA, CTP or MRA Scan Performed Prior to Start of Endovascular Thrombectomy Intervention is P (Yes, prior) or Y (Yes) And 1 or more of the following fields are blank or invalid: • Fields 02–03 (Month): not 01–12 or not 99 (unknown) • Fields 04–05 (Day): not 01–31 or not 99 (unknown) • Fields 06–07 (Hour): not 00–23 or not 99 (unknown) • Fields 08–09 (Minutes): not 00–59 or not 99 (unknown)
Data elements	Project Number, Field 01, Fields 02–09
Reference	Group 16 — Special Projects documentation is now accessible through the DAD/NACRS Abstracting Manual application on CIHI's website.

56 Project 440 — Invalid Value for Date and Time of Arterial Puncture (D1620-157)

Rule

When Special Project 440 Endovascular Thrombectomy is recorded, Fields 10–15 Date and Time of Arterial Puncture must be a valid date and time or 999999 (unknown).

These fields capture the date and time of the first puncture of whatever artery is being used for the endovascular thrombectomy intervention. Most often the groin artery (e.g., femoral) will be used for access, but in some cases a different artery may be used (e.g., arm artery [radial, brachial], neck artery [carotid]).

Criteria	Description
Selection criteria	Project Number 440 is recorded And 1 or more of the following fields are invalid: • Fields 10–11 (Day): not 01–31 or not 99 (unknown) • Fields 12–13 (Hour): not 00–23 or not 99 (unknown) • Fields 14–15 (Minutes): not 00–59 or not 99 (unknown)
Data elements	Project Number, Field 01, Fields 10–15
Reference	Group 16 — Special Projects documentation is now accessible through the DAD/NACRS Abstracting Manual application on CIHI's website.

57 Project 440 — Invalid Value for First Reperfusion Achieved (D1620-158)

Rule

When Project 440 Endovascular Thrombectomy is recorded, it is mandatory to record Field 16 First Reperfusion Achieved.

Reperfusion is achieved when flow is re-established to the ischemic region for the first time. Note that reperfusion may not be sustained by end of the intervention; this element captures whether initial flow occurred.

Criteria	Description
Selection criteria	Project Number 440 is recorded And Field 16 First Reperfusion Achieved is not equal to Y (Yes), N (No), 8 (Not applicable) or 9 (Unknown)
Data elements	Project Number, Field 16
Reference	Group 16 — Special Projects documentation is now accessible through the DAD/NACRS Abstracting Manual application on CIHI's website.

58 Project 440 — Invalid Value for Date and Time of First Reperfusion Achieved When First Reperfusion Achieved Is Y (D1620-159)

Rule

When Special Project 440 Endovascular Thrombectomy is recorded and Field 16 First Reperfusion Achieved is recorded with Y (Yes), Fields 17–22 Date and Time of First Reperfusion Achieved must be a valid date and time or 999999 (unknown).

This field captures the time of the first evidence of flow into the affected ischemic territory.

Criteria	Description
Selection criteria	Project Number 440 is recorded And Field 16 First Reperfusion Achieved is Y (Yes) And 1 or more of the following fields are blank or invalid: • Fields 17–18 (Day): not 01–31 or not 99 (unknown) • Fields 19–20 (Hour): not 00–23 or not 99 (unknown) • Fields 21–22 (Minutes): not 00–59 or not 99 (unknown)
Data elements	Project Number, Field 16, Fields 17–22
Reference	Group 16 — Special Projects documentation is now accessible through the DAD/NACRS Abstracting Manual application on CIHI's website.

59 Project 440 — Invalid Value for Final Endovascular Thrombectomy Reperfusion Outcome Achieved (D1620-160)

Rule

When Project 440 Endovascular Thrombectomy is recorded, it is mandatory to record Field 23 Final Endovascular Thrombectomy Reperfusion Outcome Achieved.

This field captures whether final perfusion was achieved and the grade of perfusion at the conclusion of the endovascular intervention, based on evidence during the final angiography imaging run.

Criteria	Description
Selection criteria	Project Number 440 is recorded And Field 23 Final Endovascular Thrombectomy Reperfusion Outcome Achieved is not equal to Y (Yes), N (No), 8 (Not applicable) or 9 (Unknown)
Data elements	Project Number, Field 23
Reference	Group 16 — Special Projects documentation is now accessible through the DAD/NACRS Abstracting Manual application on CIHI's website.

60 Number of Previous Term Deliveries and Number of Pre-Term Deliveries Indicate No Previous Delivery and Diagnosis Code or Caesarean Section Status Attribute Indicate Previous Delivery (D1801-120)

Rule

1. When Diagnosis Code O75.701 *Vaginal delivery following previous caesarean section*, or O34.201 *Uterine scar due to previous caesarean section*, or O66.401 *Failed trial of labour following previous caesarean section* is recorded, BOTH data elements Number of Previous Term Deliveries and Number of Previous Pre-Term Deliveries cannot be 00.
2. When Intervention Code 5.MD.60.^^ *Caesarean section delivery* with a Status Attribute **RA** Repeat, Indicated, Planned, **RB** Repeat, Indicated, Emergent or **RC** Repeat, No indicated, Planned is recorded, BOTH data elements Number of Previous Term Deliveries and Number of Previous Pre-Term Deliveries cannot be 00.

Criteria	Description
Selection criteria	Abstracts where Diagnosis Code O75.701, or O34.201 or O66.401 is recorded AND both data elements Number of Previous Term Deliveries and Number of Pre-Term Deliveries is 00. Abstracts where Intervention Code 5.MD.60.^^ with a Status Attribute of RA, RB, or RC is recorded and both data elements Number of Previous Term Deliveries and Number of Pre-Term Deliveries is 00.
Data elements	Number of Previous Term Deliveries, Number of Previous Pre-Term Deliveries, Diagnosis Code, Intervention Code, Status Attribute
Correct case examples	Number of Previous Pre-Term Deliveries is 00 AND Number of Previous Term Deliveries is 00 AND Diagnosis Code is not O75.701 or O34.201 or O66.401 and 5.MD.60.AA *Cesarean section delivery, lower segment transverse incision, without instrumentation* Status Attribute is PB (Primary, Indicated, Emergent)
Reference	DAD Abstracting Manual: Group 18 — Reproductive Care

61 Missing Value for Number of Previous Term Deliveries and/or Number of Previous Pre-Term Deliveries for Obstetrics Delivered Cases (D1801-135)

Rule

When an obstetrics delivered code is recorded, it is mandatory to report Number of Previous Term Deliveries and Number of Previous Pre-Term Deliveries in some provinces and territories.

Criteria	Description
Selection criteria	Abstracts from NL, NS, NB, PEI (Prince County Hospital and Queen Elizabeth Hospital) ON, MB, SK, AB, BC, NT, YK, and NU where Diagnosis Code from category O10 to O99 with a sixth digit of 1 or 2 is recorded; OR Diagnosis Code Z37.– (outcome of delivery) is assigned Diagnosis Type M; OR Intervention Code 5.MD.50.^^ or 5.MD.60.^^. AND Data element Number of Previous Term Deliveries and/or Number of Previous Pre-Term Deliveries is blank.
Data elements	Number of Previous Term Deliveries, Number of Previous Pre-Term Deliveries, Diagnosis Code, Diagnosis Type, Intervention Code
Correct case examples	Z37.000 (M) Single live birth, pregnancy resulting from both spontaneous ovulation and conception AND Data element: Number of Previous Pre-Term Deliveries is 00 AND Data element: Number of Previous Term Deliveries is 01
Reference	DAD Abstracting Manual: Group 18 — Reproductive Care

62 Scanner Used to Input Product Number and Cement — Product Number but AIM Code Was Not Enabled (D2010-161)

Rule

AIM (Automatic Identification and Mobility) code is a scanner parameter, enabled by scanning a barcode or series of barcodes in the scanner's product reference manual. The presence of the AIM code ensures that CIHI can appropriately extract the product number. There are 2 main barcode formats, HIBC and GS1, to encode the data in the current prosthesis stickers.

Examples

- HIBC format

When the barcode is scanned, the output will look like this:

]C0+H132005764015511/2215162099277E12

The AIM code is composed of the first 3 digits:]C0

- GS1 format

When the barcode is scanned, the output will look like this:

]C10110603295014577

The AIM code is composed of the first 3 digits:]C1

Criteria	Description
Selection criteria	If the first digit of Product Number/Cement — Product Number is “+”, “H” or “h” OR If the first 2 digits of the Product Number/Cement — Product Number are “01” and the total length of Product Number/Cement — Product Number is greater than or equal to 16 OR If the first 2 digits of the Product Number/Cement — Product Number are “10” or “11” and the total length of Product Number/Cement — Product Number is greater than or equal to 14
Data elements	Product Number, Cement — Product Number
Correct case examples	**Applies to data inputted using a barcode scanner only** HIBC format • Scanned output Product Number:]C0+H132005764015511/2215162099277E12 Lot Number:]C0+H132005764015511/2215162099277E12 GS1 format • Scanned output GTIN:]C10110603295014577
References	CJRR barcode bulletin: https://www.cihi.ca/en/entering-product-barcodes-for-the-canadian-joint-replacement-registry HIBC specification: https://www.hibcc.org/wp-content/uploads/SLS-2.6-Final.pdf GS1 general specification https://www.gs1.org/sites/default/files/docs/barcodes/GS1_General_Specifications.pdf

Appendix: Post-procedural disorder codes

This list identifies all post-procedural disorder codes. When a code from this list is assigned, it always requires an external cause code. When the applicable external cause is from Y60–Y84, a Diagnosis Cluster must be applied.

E89.0 Postprocedural hypothyroidism
E89.1 Postprocedural hypoinsulinaemia
E89.2 Postprocedural hypoparathyroidism
E89.3 Postprocedural hypopituitarism
E89.4 Postprocedural ovarian failure
E89.5 Postprocedural testicular hypofunction
E89.6 Postprocedural adrenocortical (-medullary) hypofunction
E89.8 Other postprocedural endocrine and metabolic disorders
E89.9 Postprocedural endocrine and metabolic disorder, unspecified
G97.0 Cerebrospinal fluid leak from spinal puncture
G97.1 Other reactions to spinal and lumbar puncture
G97.2 Intracranial hypotension following ventricular shunting
G97.8 Other postprocedural disorders of nervous system
G97.9 Postprocedural disorder of nervous system, unspecified
H59.0 Keratopathy (bullous aphakic) following cataract surgery
H59.80 Cataract (lens) fragments in eye following cataract surgery
H59.81 Cystoid macular oedema following cataract surgery
H59.88 Other postprocedural disorders of eye and adnexa
H59.9 Postprocedural disorder of eye and adnexa, unspecified
H95.0 Recurrent cholesteatoma of postmastoidectomy cavity
H95.1 Other disorders following mastoidectomy
H95.8 Other postprocedural disorders of ear and mastoid process
H95.9 Postprocedural disorder of ear and mastoid process, unspecified
I97.0 Postcardiotomy syndrome
I97.1 Other functional disturbances following cardiac surgery
I97.2 Postmastectomy lymphoedema syndrome
I97.8 Other postprocedural disorders of circulatory system, not elsewhere classified
I97.9 Postprocedural disorder of circulatory system, unspecified

J95.00 Haemorrhage from tracheostomy stoma
J95.01 Infection of tracheostomy stoma
J95.02 Malfunction of tracheostomy stoma
J95.03 Tracheo-esophageal fistula following tracheostomy
J95.08 Other tracheostomy complication
J95.1 Acute pulmonary insufficiency following thoracic surgery
J95.2 Acute pulmonary insufficiency following nonthoracic surgery
J95.3 Chronic pulmonary insufficiency following surgery
J95.4 Mendelson’s syndrome
J95.5 Postprocedural subglottic stenosis
J95.80 Postprocedural pneumothorax
J95.81 Transfusion related acute lung injury (TRALI)
J95.88 Other postprocedural respiratory disorders
J95.9 Postprocedural respiratory disorder, unspecified
K91.0 Vomiting following gastrointestinal surgery
K91.1 Postgastric surgery syndromes
K91.2 Postsurgical malabsorption, not elsewhere classified
K91.3 Postoperative intestinal obstruction
K91.40 Haemorrhage from colostomy stoma
K91.41 Infection of colostomy stoma
K91.42 Malfunction of colostomy stoma, not elsewhere classified
K91.43 Haemorrhage from enterostomy stoma
K91.44 Infection of enterostomy stoma
K91.45 Enterostomy malfunction, not elsewhere classified
K91.5 Postcholecystectomy syndrome
K91.60 Haemorrhage from gastrostomy stoma
K91.61 Infection of gastrostomy stoma
K91.62 Gastrostomy malfunction, not elsewhere classified
K91.8 Other postprocedural disorders of digestive system, not elsewhere classified
K91.9 Postprocedural disorder of digestive system, unspecified
M96.0 Pseudarthrosis after fusion or arthrodesis
M96.1 Postlaminectomy syndrome, not elsewhere classified
M96.2 Postradiation kyphosis
M96.3 Postlaminectomy kyphosis

M96.4 Postsurgical lordosis
M96.5 Postradiation scoliosis
M96.60 Fracture of bone following insertion of joint prosthesis
M96.68 Fracture of bone following insertion of other and unspecified orthopaedic implant
M96.8 Other postprocedural musculoskeletal disorders
M96.9 Postprocedural musculoskeletal disorder, unspecified
N99.0 Postprocedural renal failure
N99.1 Postprocedural urethral stricture
N99.2 Postoperative adhesions of vagina
N99.3 Prolapse of vaginal vault after hysterectomy
N99.4 Postprocedural pelvic peritoneal adhesions
N99.50 Haemorrhage from external stoma of urinary tract
N99.51 Infection of external stoma of urinary tract
N99.52 Other malfunction of external stoma of urinary tract, NEC
N99.8 Other postprocedural disorders of genitourinary system
N99.9 Postprocedural disorder of genitourinary system, unspecified

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