

NACRS

National Ambulatory Care
Reporting System
Open-Year Data Quality
Test Specifications

2024-2025



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

Unless otherwise indicated, this product uses data provided by Canada's provinces and territories.

All rights reserved.

The contents of this publication may be reproduced unaltered, in whole or in part and by any means, solely for non-commercial purposes, provided that the Canadian Institute for Health Information is properly and fully acknowledged as the copyright owner. Any reproduction or use of this publication or its contents for any commercial purpose requires the prior written authorization of the Canadian Institute for Health Information. Reproduction or use that suggests endorsement by, or affiliation with, the Canadian Institute for Health Information is prohibited.

For permission or information, please contact CIHI:

Canadian Institute for Health Information 495 Richmond Road, Suite 600 Ottawa, Ontario K2A 4H6 Phone: 613-241-7860

Fax: 613-241-8120

cihi.ca

copyright@cihi.ca

© 2025 Canadian Institute for Health Info rmation

How to cite this document:

Canadian Institute for Health Information. *National Ambulatory Care Reporting System Open-Year Data Quality Test Specifications, 2024–2025.*Ottawa, ON: CIHI; February 2025.

Cette publication est aussi disponible en français sous le titre *Spécifications* techniques sur les tests de qualité des données en cours d'exercice, Système national d'information sur les soins ambulatoires, 2024-2025.

Table of contents

Inti	rodu	ıction	. 5
	Pu	rpose	. 5
	Up	dates	. 6
Ор	en-y	year data quality tests: Summary and rationale	. 7
Ор	en-y	year data quality tests	11
	1	Length of Stay Greater Than 120 Hours (N0027-146)	11
	2	Visit Disposition Inconsistent With Institution To (N0035-176)	12
	3	Suicide in Facility/Died in Facility (N0035-198)	13
	4	U07.4 Post COVID-19 condition Assigned as Main Problem (N0044-185)	14
	5	R57.2 Septic shock as Main Problem (N0044-193)	15
	6	Missing Additional Diagnosis Code to Identify the Specific Condition Complicating Pregnancy Childbirth and the Puerperium O99 (N0045-128)	16
	7	Missing Additional Diagnosis Code to Specify the Type of Sepsis in SIRS of Infectious Origin and/or Septic Shock (N0045-129)	17
	8	Alcohol Poisoning External Cause Code Without Corresponding Alcohol Poisoning T-Code (N0045-163)	18
	9	Incorrect J44.– (COPD) Code Assigned With Lower Respiratory Infection Code (N0045-194)	
	10	Cementless Hip/Knee Replacement CCI Codes and the Presence of Cement Sticker (N0047-180)	20
	11	Extent Attribute UN (Unknown) With Hip Replacement (N0050-86)	21
	12	Incorrect Value of Extent Attribute for Hip Arthroplasty Codes 1.VA.53.^^ (N0050-166)	22
	13	Type of Restraint N Recorded With Type of Restraint M, C, P or S (N0171-190)	
	14	Type of Restraint M, C, P, S or N Recorded More Than Once (N0171-191)	25
		Frequency of Restraint Use N Recorded With Type of Restraint M, C, P or S (N0172-192)	
	16	Project 340 — Project Not Completed When an "Applicable Condition" Is Recorded (N9340-99)	
	17	Project 340 — Not Applicable, Unknown or Invalid Value for Prescription for Antithrombotic Medication at Discharge (N9340-103)	
	18	Project 340 — Missing, Invalid or Unknown Value for Date and Time	_0
	. •	of Acute Thrombolysis Administration When Administration of Acute	
		Thrombolysis Is Y or P (N9340-121)	30

19	Project 340 — Invalid or Unknown Value for Stroke Symptom Onset	
	Date and Time (N9340-123)	. 31
20	Project 340 — High volume of N for Referral to Stroke Prevention Services at ED Discharge (N9340-125)	. 32
21	Project 792 — Ontario Video Capsule Endoscopy (VCE) Project Not Completed When CCI Code 3.OZ.94.AY Is Recorded (N9792-195)	. 33
22	Missing CJRR Prosthesis Data for Hip/Knee Replacements (NCJ00-197)	. 34
23	Scanner Used to Input Product Number and Cement — Product Number but AIM Code Was Not Enabled (NCJ10-161)	35

Introduction

As part of the Canadian Institute for Health Information's (CIHI's) commitment to quality data, the National Ambulatory Care Reporting System (NACRS) 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 NACRS clients create their own local 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 NACRS, along with their rationale, rule, patient care type, submission level, selection criteria and the data elements used in the analysis. Each test is indexed by a reference number and this number is used for all communication with clients.

The quarterly NACRS OYDQ reports are made available to facilities and/or provincial/territorial ministries of health via the <u>DAD and NACRS Applications web page</u>. Click the following links once logged in: Operational Reports > NACRS > Open-Year Data Quality Reports. Automated email notifications are also sent to clients when these reports are posted.

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 NACRS abstract identification data elements, such as Chart Number, Fiscal Year, Fiscal Period, Abstract Number and Registration 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, number of total eligible abstracts and the percent error for each applicable OYDQ test. Provincial and national error percentages are also shown as comparison. Further information on the content of OYDQ reports can be downloaded via the DAD and NACRS Applications web page. Click the following links once logged in: Decoders > FY (choose the current fiscal year) > OYDQ Detailed and Summary Report Decoder (PDF).

Note: The same abstract may be identified as having more than one data quality issue, therefore it may appear in several tests.

Updates

The NACRS 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 NACRS 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 your questions to CIHI at cad@cihi.ca.

Open-year data quality tests: Summary and rationale

The following table provides a brief summary of the NACRS 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
N0027-146	Length of Stay Greater Than 120 Hours	Ambulatory care records are primarily expected to have a length of stay shorter than 120 hours (5 days).	Impacts length of stay analysis and Time Spent in ED indicator.
			Accurate data are required for analysis.
N0035-176	Visit Disposition Inconsistent With Institution To	The Visit Disposition and the CIHI Institution Type assigned to the Institution To number must match.	Accurate data is important for data analysis.
N0035-198 (NEW)	Suicide in Facility/Died in Facility	Visit Disposition 74 is recorded when the intentional self-harm injuries result in death.	Accurate data is required for analysis.
		Visit Disposition 72 is recorded when the death is due to another condition unrelated to the intentional self-harm injuries.	
N0044-185	U07.4 Post COVID-19 condition Assigned as Main Problem	When U07.4 Post COVID-19 condition is assigned on an abstract, it must be assigned as Other Problem.	Accurate data is required for in-depth analyses on the impact of COVID-19 on health care systems.
N0044-193	R57.2 <i>Septic shock</i> as Main Problem	R57.2 <i>Septic shock</i> must never be the Main Problem.	Accurate data is required for in-depth analyses.
N0045-128	Missing Additional Diagnosis Code to Identify the Specific Condition Complicating Pregnancy Childbirth and the Puerperium O99	When a code from any one of the subcategories within O99 Other maternal diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium, is assigned, it is mandatory to assign an additional code to identify the specific condition per the use additional code instruction in the tabular at this category.	Research on obstetrical complications is adversely affected by incomplete data.

OYDQ test			
number	OYDQ test title	Short description	Rationale
N0045-129	Missing Additional Diagnosis Code to Specify the Type of Sepsis in SIRS of Infectious Origin and/or Septic Shock	When R65.0 Systemic inflammatory response syndrome of infectious origin without organ failure or R65.1 Systemic inflammatory response syndrome of infectious origin with acute organ failure or R57.2 Septic shock is assigned, it is mandatory to assign an additional code to identify the type of sepsis.	Impacts In-Hospital Sepsis Rate and Sepsis Mortality Rate. Accurate data are required for analysis.
N0045-163	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.
N0045-194	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 <i>Chronic obstructive pulmonary disease with acute lower respiratory infection</i> .	Accurate data is required for in-depth analyses.
N0047-180	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.
N0050-86	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.
N0050-166	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).
N0171-190	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.

OYDQ test number	OYDQ test title	Short description	Rationale
N0171-191	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.
N0172-192	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.
N9340-99	Project 340 — Project Not Completed When an "Applicable Condition" Is Recorded	When a stroke Diagnosis Code is recorded, the Project Number 340 must be completed.	Stroke is a high-priority health initiative.
N9340-103	Project 340 — Not Applicable, Unknown or Invalid Value for Prescription for Antithrombotic Medication at Discharge	When Project 340 is recorded, it is mandatary to complete the field Prescription for Antithrombotic Medication at Discharge whether patients with a diagnosis of ischemic stroke received a prescription for antithrombotic medication from the ED.	Stroke is a high-priority health initiative.
N9340-121	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 149 to 156 (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.
N9340-123	Project 340 — Invalid or Unknown Value for Stroke Symptom Onset Date and Time	When Project 340 is recorded, it is mandatory to complete Fields 158 to 169 (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.
N9340-125	Project 340 — High Volume of N Referral to Stroke Prevention Services at ED Discharge	When Project 340 is recorded, it is mandatory to complete Field 147 (Referral to Stroke Prevention Services at ED Discharge). This field captures whether patients with a diagnosis of stroke or transient ischemic attack receive a referral for stroke prevention follow-up at discharge.	Stroke is a high-priority health initiative.

OYDQ test number	OYDQ test title	Short description	Rationale
N9792-195 (NEW)	Project 792 — Ontario Video Capsule Endoscopy (VCE) Project Not Completed When CCI Code 3.OZ.94.AY Is Recorded	In Ontario, it is mandatory to report Special Project 792 when CCI intervention 3.OZ.94.AY Imaging Intervention NEC, digestive system NEC with cine/video recording (camera transmitter) is reported.	Video capsule endoscopy is a high-priority health initiative.
NCJ00-197 (NEW)	Missing CJRR Prosthesis Data for Hip/Knee Replacements	When a hip/knee replacement is recorded by a facility that is expected to submit CJRR data to NACRS, prosthesis data should be recorded.	The Ontario Ministry of Health requires submission of CJRR prosthesis data for all hip/ knee replacements.
NCJ10-161	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 Length of Stay Greater Than120 Hours (N0027-146)

Rule

Ambulatory care records are primarily expected to have a Length of Stay (LOS) shorter than 120 hours (5 Days). However, a LOS longer than 120 hours may be acceptable in some situations.

This data quality test identifies records with potential error with the date/time data elements (listed below) used to calculate the derived LOS Hours.

Note: This test will be completed for all records where the derived LOS Hours is available.

Criteria	Description
Patient care type All patient care types	
Submission level	Levels 1–3
Selection criteria Abstracts where the derived LOS Hours is greater than 120 hours	
Data element	Triage Date; Triage Time; Date of Registration/Visit; Registration/Visit Time; Visit Disposition; Disposition Date; Disposition Time; Date Patient Left Emergency Department (ED); Time Patient Left Emergency Department (RD)
Reference	NACRS Abstracting Manual

2 Visit Disposition Inconsistent With Institution To (N0035-176)

Rule

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

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

Criteria	Description
Selection criteria	NACRS ED Level 3 abstracts where Visit Disposition is not consistent with CIHI Institution Type assigned to Institution To number: Where
	Visit Disposition 16 is not mapped to CIHI Institution Type 0, 6, 8, F, J, M, N, U or Blank OR
	Visit Disposition 30 is not mapped to CIHI Institution Type 4, T, P or U OR
	Visit Disposition 40 is not mapped to CIHI Institution Type G, H or U
Data element	Visit Disposition, Institution To
Correct case example	Visit Disposition 16 — Home With Support/Referral is recorded along with an Institution To number assigned to CIHI Institution Type 6 — Nursing Stations.
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. Alberta facilities should refer to the Alberta Supplement to 2022–2023 NACRS manual.
	NACRS Abstracting Manual: DE 35 Visit Disposition, DE 39 Institution To
	Job Aid — Ensuring Accurate Discharge/Visit Disposition and Institution To Assignment

3 Suicide in Facility/Died in Facility (N0035-198)

Rule

When a death occurs post-admission as a result of injuries sustained from a suicide attempt that occurred during the current hospitalization, the Visit Disposition should be 74 — Suicide in Facility. Death does not have to happen immediately (e.g., if initial resuscitation efforts are successful), but it does have to occur within the same admission to the reporting facility.

When death occurs post-admission as a result of **another** condition (i.e., not a result of the injuries sustained from the suicide attempt), the Visit Disposition should be 72 — Died in Facility.

Note: This test provides an opportunity to examine whether the correct Visit Disposition is assigned for Suicide in Facility and/or Died in Facility. When a chart review reveals that the correct Visit Disposition has been assigned, no correction is necessary.

Criteria	Description
Selection criteria	Day surgery abstracts with
	 Diagnosis Code U98.20 Place of occurrence, hospital and an external cause code in category X60–X84 Intentional self-harm and Visit Disposition 72 — Died in Facility or 74 — Suicide in Facility recorded
	OR
	Visit Disposition 74 — Suicide in Facility without Diagnosis Code U98.20 Place of occurrence, hospital or an external cause code in category X60–X84 Intentional self-harm recorded
Data element	Visit Disposition, Main Problem, Other Problem
Correct case example	Visit Disposition 74 is recorded when a patient suffered an intentional self-harm injury in the hospital (post-admission) and the injury resulted in death.
	Visit Disposition 74 is recorded when a patient suffered an intentional self-harm injury in the hospital (post-admission), initial resuscitation efforts were successful but the patient deteriorated due to worsening of the self-harm injury conditions and the injury resulted in death.
	Visit Disposition 72 is recorded when a patient suffered an intentional self-harm injury in the hospital (post-admission) but death occurred due to another condition unrelated to the self-harm injury.
Reference	NACRS Abstracting Manual: Data Element 35 — Visit Disposition

4 U07.4 Post COVID-19 condition Assigned as Main Problem (N0044-185)

Rule

When U07.4 *Post COVID-19 condition* is assigned on an abstract, it must be assigned as Other Problem.

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 as Main Problem
Data element	Main Problem
Correct case example	U07.4 is recorded as Other Problem
Reference	Canadian Coding Standards for Version 2022 ICD-10-CA and CCI — Addendum:
	Pandemics and Epidemics (COVID-19)

5 R57.2 Septic shock as Main Problem (N0044-193)

Rule

R57.2 Septic shock must never be the Main Problem.

Criteria	Description
Patient care type	All patient care types
Submission level	Level 3
Selection criteria	Abstracts where R57.2 is assigned Main Problem
Data element	Main Problem
Correct case example	A41.9 (MP) Sepsis, unspecified
	R57.2 (OP) Septic shock
Reference	Canadian Coding Standards: Use Additional Code/Code Separately Instructions; Underlying Symptoms or Conditions; Septicemia/Sepsis; Systemic Inflammatory Response Syndrome (SIRS)

6 Missing Additional Diagnosis Code to Identify the Specific Condition Complicating Pregnancy Childbirth and the Puerperium O99 (N0045-128)

Rule

When a code from any one of the subcategories within O99 Other maternal diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium is assigned, it is mandatory to assign an additional code to identify the specific condition as per the use additional code instruction in the tabular at this category.

Criteria	Description
Patient care type	All patient care types
Submission level	Levels 1–3
Selection criteria	Abstracts where a Diagnosis Code of:
	O99.0– is recorded <u>without</u> a code from D50–D64
	O99.1– is recorded <u>without</u> a code from D65–D89
	O99.2– is recorded <u>without</u> a code from E00–E07, E15–E34, E50–E89
	• O99.3– is recorded <u>without</u> a code from F00–F52, F54–F99, G00–G99
	O99.4– is recorded <u>without</u> a code from I00–I09 or I20–I99
	O99.5– is recorded <u>without</u> a code from J00–J99
	• O99.6– is recorded <u>without</u> a code from K00–K63, K65–K66, K80–K93
	O99.7– is recorded <u>without</u> a code from L00–L99
	 O99.8– is assigned <u>without</u> a code from B90–B94, C00–D48, H00–H95, M00–M82, M83.2–M99, N14–N15.0, N15.8–N15.9, N20–N39, N60–N64, N80–N90, Q00–Q99, R00–R94.8
Data element	Main Problem; Other Problem
Correct case example	O99.001 (MP) Anaemia complicating pregnancy, childbirth and the puerperium delivered with or without mention of antepartum condition
	D64.9 (OP) Anaemia, unspecified
Reference	Use Additional Code instruction within ICD-10-CA direction at category O99
	Canadian Coding Standards: Use additional Code/Code Separately Instructions
	Complicated Pregnancy Versus Uncomplicated Pregnancy

7 Missing Additional Diagnosis Code to Specify the Type of Sepsis in SIRS of Infectious Origin and/or Septic Shock (N0045-129)

Rule

When R65.0 Systemic inflammatory response syndrome of infectious origin without organ failure or R65.1 Systemic inflammatory response syndrome of infectious origin with acute organ failure or R57.2 Septic shock, is assigned, it is mandatory to assign an additional code to identify the type of sepsis.

Note: If the documentation does not specify the type of sepsis, then the additional code to assign is A41.9 *Sepsis*, *unspecified*.

Criteria	Description
Patient care type	All patient care types
Submission level	Levels 1–3
Selection criteria	Abstracts where a Diagnosis Code(s) of R65.0, R65.1 or R57.2 is recorded without one of the following Diagnosis Codes to identify the specific type of sepsis: 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, P36, P37.2 or P37.51
Data element	Main Problem, Other Problem
Correct case example	T81.4 (MP) Infection following a procedure, not elsewhere classified [Dx Cluster A]
	A41.0 (OP) Sepsis due to Staphylococcus aureus [Dx Cluster A]
	T81.1 (OP) Shock during or resulting from a procedure, not elsewhere classified [Dx Cluster A]
	R57.2 (OP) Septic shock [Dx Cluster A]
	Y83.2 (OP) Surgical operation with anastomosis, bypass or graft [Dx Cluster A]
Reference	Use additional Code Instruction within ICD-10-CA at category R65 and R57.2
	Canadian Coding Standards: Use additional Code/Code Separately Instructions Septicemia/Sepsis; Systemic Inflammatory Response Syndrome (SIRS)

8 Alcohol Poisoning External Cause Code Without Corresponding Alcohol Poisoning T-Code (N0045-163)

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
Patient care type	All patient care types
Submission level	Level 3
Selection criteria	Abstracts with external cause code X45, X65 or Y15 without a Diagnosis Code from category T51.–
Data element	Main Problem, Other Problem
Correct case example	T51.9 (MP) Toxic effect of alcohol, unspecified
	X45 (OP) Accidental poisoning by and exposure to alcohol
Reference	ICD-10-CA Table of Drugs
	Coding Standard: Adverse Reactions in Therapeutic Use Versus Poisoning

9 Incorrect J44.— (COPD) Code Assigned With Lower Respiratory Infection Code (N0045-194)

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 as Main Problem
	AND Other Problem (OP) as either J10.0, J11.0, J12, J13, J14, J15, J16, J18, J20 or J21
Data element	Main Problem, Other Problem
Correct case example	J44.0 (MP) Chronic obstructive pulmonary disease with acute lower respiratory infection
	J18.9 (OP) Pneumonia, unspecified
Reference	Canadian Coding Standards: Pneumonia in Patients With Chronic Obstructive Pulmonary Disease (COPD)
	ICD-10-CA alphabetical index

10 Cementless Hip/Knee Replacement CCI Codes and the Presence of Cement Sticker (N0047-180)

Rule

When a cement product number is present in Field CJ05, 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 Field CJ05.

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

Criteria	Description
Patient care type	All patient care types
Submission level	Levels 1–3
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
Data element	is missing Main Intervention, Other Intervention, Cement — Product Number
Correct case example	1.VG.53.LA-PM-N <i>Implantation of internal device, knee joint with synthetic material</i> (e.g., bone paste, cement) single component prosthetic device with 1 cement sticker product number 6191-0-001 in Field CJ05.
Reference	CCI v2022

11 Extent Attribute UN (Unknown) With Hip Replacement (N0050-86)

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
Patient care type	All patient care types
Submission level	Levels 1–3
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 element	Main Intervention, Other Intervention, Extent Attribute, Status Attribute, Out-of-Hospital Indicator
Correct case example	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])

12 Incorrect Value of Extent Attribute for Hip Arthroplasty Codes 1.VA.53.^^ (N0050-166)

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
Patient care type	All patient care types
Submission level	Levels 1–3
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 element	Main Intervention, Other Intervention, Extent Attribute

Criteria	Description
Correct case example	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

13 Type of Restraint N Recorded With Type of Restraint M, C, P or S (N0171-190)

Rule

Type of Restraint value N (None) is assigned for all cases fitting the collection criteria (i.e., patients with a Main Problem or Other Problem that is selected from ICD-10-CA Chapter V: Mental and Behavioural Disorders [excluding Organic Disorders F00–F09] or Intentional Self-Harm ICD-10-CA categories X60–X84), where no restraint use is documented.

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).

Criteria	Description
Patient care type	ED
Submission level	Levels 1–3
Selection criteria	Abstracts where Type of Restraint N is recorded with Type of Restraint M, C, P or S.
Data element	Type of Restraint
Correct case example	Type of Restraint M (Mechanical restraint) is recorded without Type of Restraint N (None).
Reference	NACRS Abstracting Manual: DE 171 — Type of Restraint

14 Type of Restraint M, C, P, S or N Recorded More Than Once (N0171-191)

Rule

The Type of Restraint field is recorded for all restraint devices meeting the collection criteria (i.e., patients with a Main Problem or Other Problem that is selected from ICD-10-CA Chapter V: Mental and Behavioural Disorders [excluding Organic Disorders F00–F09] or Intentional Self-Harm ICD-10-CA categories X60–X84). Record all devices that were used but record each device only once.

Criteria	Description
Patient care type	ED
Submission level	Levels 1–3
Selection criteria	Abstracts where Type of Restraint M, C, P, S or N is recorded more than once.
Data element	Type of Restraint
Correct case example	Mechanical restraints were used multiple times for a patient meeting the above collection criteria. Type of Restraint M (Mechanical restraint) is recorded only once.
Reference	NACRS Abstracting Manual: DE 171 — Type of Restraint

15 Frequency of Restraint Use N Recorded With Type of Restraint M, C, P or S (N0172-192)

Rule

The Frequency of Restraint Use field is value N (None) for cases fitting the collection criteria (i.e., patients with a Main Problem or Other Problem that is selected from ICD-10-CA Chapter V: Mental and Behavioural Disorders [excluding Organic Disorders F00–F09] or Intentional Self-Harm ICD-10-CA categories X60–X84) 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
Patient care type	ED
Submission level	Levels 1–3
Selection criteria	Abstracts where Frequency of Restraint Use N is recorded with Type of Restraint M, C, P or S.
Data element	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	NACRS Abstracting Manual: DE 172 — Frequency of Restraint Use

16 Project 340 — Project Not Completed When an "Applicable Condition" Is Recorded (N9340-99)

Rule

Special Project 340 Canadian Stroke Strategy Performance Improvement is mandatory for all Ontario Level 3 emergency department records, with the exception of cases admitted to the acute care facility via its own ED or transferred to another ED facility in the same continuous episode of care.

This project should 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:

- 160.- Subarachnoid haemorrhage
- 161.- Intracerebral haemorrhage
- 163.- Cerebral infarction
- 164 Stroke, not specified as haemorrhage or infarction
- 167.6 Nonpyogenic thrombosis of intracranial venous system
- G08 Intracranial and intraspinal phlebitis and thrombophlebitis
- 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
Patient care type	ED
Submission level	Level 3
Selection criteria	Abstracts from ON where Project 340 is not completed when a Diagnosis Code for one of the "applicable conditions" is recorded as Main or Other Problem
	Exclusions:
	Cases admitted as inpatient within the same reporting facility (Visit Disposition is 06 or 07)
	Cases where an institution number classified as Ambulatory Care is recorded in the Institution To field
	Exclusion: Patients younger than 1
Data element	Main Problem, Other Problem, Project Number
Reference	NACRS Abstracting Manual, Special Project Information (Data Elements 145 to 169) — Special Projects documentation is now accessible through the DAD/NACRS Abstracting
	Manual application on CIHI's website.

17 Project 340 — Not Applicable, Unknown or Invalid Value for Prescription for Antithrombotic Medication at Discharge (N9340-103)

Rule

When Special Project 340 Canadian Stroke Strategy Performance Improvement is completed, it is mandatory to record Field 157 Prescription for Antithrombotic Medication at Discharge. This field captures whether a patient received a prescription for antithrombotic medication at discharge from ED.

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

Criteria	Description
Patient care type	ED
Submission level	Level 3
Selection criteria	An "applicable condition" is recorded
	AND
	Field 157 Prescription for Antithrombotic Medication at Discharge is 8 (not applicable), 9 (unknown) or is invalid
	AND
	Visit Disposition is not 71 Dead on Arrival (DOA), 72 Died in Facility, 73 Medical Assistance in Dying (MAID) or 74 Suicide in Facility
Data element	Project Number, Field 157
Reference	NACRS Abstracting Manual, Special Project Information (Data Elements 145 to 169) —
	Special Projects documentation is now accessible through the DAD/NACRS Abstracting
	Manual application on CIHI's website.

18 Project 340 — Missing, Invalid or Unknown Value for Date and Time of Acute Thrombolysis Administration When Administration of Acute Thrombolysis Is Y or P (N9340-121)

Rule

When Special Project 340 Canadian Stroke Strategy Performance Improvement is completed, it is mandatory to record Fields 149 to 156 Date and Time of Acute Thrombolysis Administration. 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
Patient care type	ED
Submission level	Level 3
Selection criteria	An "applicable condition" is recorded
	AND
	Field 148 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 149–150 (Month): is blank, or is 99 (unknown) or is not 01–12
	• Fields 151–152 (Day): is blank, or is 99 (unknown) or is not 01–31
	• Fields 153–154 (Hour): is blank, or is 99 (unknown) or is not 00–23
	• Fields 155–156 (Minutes): is blank, or is 99 (unknown) or is not 00–59
	Exclusions:
	When acute thrombolysis was given for a condition other than an "applicable condition"
	Hemorrhagic strokes
Data element	Project Number, Fields 149 to 156
Reference	NACRS Abstracting Manual, Special Project Information (Data Elements 145 to 169) — Special Projects documentation is now accessible through the DAD/NACRS Abstracting Manual application on CIHI's website.

19 Project 340 — Invalid or Unknown Value for Stroke Symptom Onset Date and Time (N9340-123)

Rule

When Special Project 340 Canadian Stroke Strategy Performance Improvement is completed, it is mandatory to record Fields 158 to 169 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 missing, 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
Patient care type	ED
Submission level	Level 3
Selection criteria	An "applicable condition" is recorded
	AND
	1 or more of the following fields are unknown or invalid:
	Fields 158–161 (Year): is 9999 (unknown) or is not a valid 4-character code less than or equal to current calendar year
	• Fields 162–163 (Month): is 99 (unknown) or is not 01–12
	• Fields 164–165 (Day): is 99 (unknown) or is not 01–31
	• Fields 166–167 (Hour): is 99 (unknown) or is not 00–23
	• Fields 168–169 (Minutes): is 99 (unknown) or is not 00–59
Data element	Project Number, Fields 158 to 169
Reference	NACRS Abstracting Manual, Special Project Information (Data Elements 145 to 169) — Special Projects documentation is now accessible through the DAD/NACRS Abstracting Manual application on CIHI's website.

20 Project 340 — High volume of N for Referral to Stroke Prevention Services at ED Discharge (N9340-125)

Rule

When Special Project 340 Canadian Stroke Strategy Performance Improvement is completed, it is mandatory to record Field 147 Referral to Stroke Prevention Services at ED Discharge. This field captures whether patients with an "applicable condition" receive a referral for stroke prevention follow-up at discharge.

A percentage higher than 50% of abstracts with value N (No) may indicate a need to investigate practices around the capture of referral to stroke prevention services at ED discharge.

Criteria	Description
Patient care type	ED
Submission level	Level 3
Selection criteria	An "applicable condition" is recorded
	AND
	At least 50% of these records have Field 147 Referral to Stroke Prevention Services at ED Discharge recorded as N.
Data element	Project Number, Field 147
Reference	NACRS Abstracting Manual, Special Project Information (Data Elements 145 to 169) — Special Projects documentation is now accessible through the DAD/NACRS Abstracting Manual application on CIHI's website.

21 Project 792 — Ontario Video Capsule Endoscopy (VCE) Project Not Completed When CCI Code 3.OZ.94.AY Is Recorded (N9792-195)

Rule

In Ontario, it is mandatory to report Special Project 792 when CCI intervention 3.OZ.94.AY *Imaging Intervention NEC, digestive system NEC with cine/video recording (camera transmitter)* is reported on a NACRS abstract.

Criteria	Description
Patient care type	All patient care types
Submission level	Level 3
Selection criteria	Abstracts from Ontario where Project 792 is not completed when 3.OZ.94.AY is recorded in the Main Intervention (DE46) or Other Intervention(s) (DE47) fields.
Data element	Main Intervention, Other Intervention, Project Number
Reference	NACRS Abstracting Manual, Special Project Information (Data Elements 145 to 169) — Special Projects documentation is now accessible through the DAD/NACRS Abstracting Manual application on CIHI's website.

22 Missing CJRR Prosthesis Data for Hip/Knee Replacements (NCJ00-197)

Rule

When a hip/knee replacement is recorded, ensure fields CJ00B-CJ11 are completed.

Note: This test applies only to facilities that are expected to submit CJRR prosthesis data for hip/knee replacements in NACRS, per jurisdiction-specific requirements.

Criteria	Description
Patient care type	All patient care types
Submission level	Levels 1–3
Selection criteria	CCI codes Hip: 1.SQ.53^^ and 1.VA.53.^^ Knee: 1.VG.53.^^ and 1.VP.53.^^
	Province Ontario
	Facilities 51657, 51754, 52150, 53732, 53972, 54001, 54044, 54054, 54057, 54073, 54079, 54080, 54085, 54093, 54103, 54107, 54108, 54109, 54124, 54130, 54144, 54160, 54168, 54171, 54177, 54186, 54197, 54200, 54205, 54209, 54233, 54235, 54236, 54248, 54266, 54268, 54285, 54310, 54315, 54414, 54448, 54631, 54734, 54756, 54774, 54805, 54829, 54832, 54837, 54841, 54845, 54857, 54864, 54870, 57557 If the procedure using the above criteria has empty fields for CJ00B–CJ11
Data element	Reporting Facility Ambulatory Care Number, Submission Period, Abstract ID Number, Revision Reason, A/B Side, A/B Cement, A/B Cement Other, A/B Cement Product Number, A/B Cement Lot Number, A–F Component, Manufacturer, Manufacturer Other, Product Number, Lot Number
Reference	CCI v2022

23 Scanner Used to Input Product Number and Cement — Product Number but AIM Code Was Not Enabled (NCJ10-161)

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:

JC0+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
Patient care type	All patient care types
Submission level	Levels 1–3
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 element	Product Number, Cement — Product Number
Correct case example	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
Reference	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



CIHI Ottawa

495 Richmond Road Suite 600 Ottawa, Ont. K2A 4H6

613-241-7860

CIHI Toronto

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

CIHI Victoria

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

CIHI Montréal

1010 Sherbrooke Street West Suite 511 Montréal, Que. H3A 2R7 514-842-2226

cihi.ca









