



National Ambulatory Care Reporting
System Open-Year Data Quality Test
Specifications, 2014–2015



Our Vision

Better data. Better decisions.
Healthier Canadians.

Our Mandate

To lead the development and maintenance of comprehensive and integrated health information that enables sound policy and effective health system management that improve health and health care.

Our Values

Respect, Integrity, Collaboration,
Excellence, Innovation

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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 that will be sent at a later date to facilities to communicate suspect data quality issues for investigation and/or correction as applicable; and
- Help NACRS clients create their own data quality audits to identify abstracts with suspected data quality issues.

This document lists the OYDQ tests performed on the NACRS, along with their 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. Please note that the reference numbers have changed from the numbers used in previous years.

For certain OYDQ tests that include day surgery and other types of ambulatory care please refer to the National MIS Standards Functional Centre Accounts to Ambulatory Care Group Mapping Table. It is located in Appendix D of the *NACRS Manual* and will provide a list of valid MIS functional centres for a variety of ambulatory visit types.

Once clients have identified abstracts, with suspected data quality issues, using the selection criteria found within this OYDQ document, it is highly recommended they resolve the issues and submit corrections to CIHI.

Please note that facilities that are newly submitting as of fiscal year 2013–2014 will not receive OYDQ reports for this fiscal year, but will begin to receive reports in the second year of their data submission.

Updates

The NACRS Open-Year Data Quality Test Specifications document is updated every fiscal year with new or deleted 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 *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*.

For more information, please contact 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 2014–2015. In the rationale column, the table also highlights a number of key impacts of correcting these DQ issues.

OYDQ Test Number	OYDQ Test Title	Short Description	Rationale
N0045-52	Post-Procedure Disorder Code Recorded Without an External Cause Code	All post-procedural disorder codes require an external cause code (Y60–Y84 or V01–X59).	Volumes of this data quality issue are high. Post-procedural codes are used in reports which are provided to external clients.
N0047-83	Status Attribute Not Equal to DX (Diagnostic) With Coronary Angiogram	The Intervention code 3.IP.10.VX Xray, heart with coronary arteries of left heart structures using percutaneous transluminal arterial (retrograde) approach should have a status attribute of DX (Diagnostic) when the only intervention episode is coronary angiogram 3.IP.10.VX and there is only one intervention episode.	The Status Attribute is a new mandatory field for v2012 of CCI. It is important to distinguish diagnostic coronary angiogram from other coronary angiograms.
N9340-99	Stroke Diagnosis Code Without Project 340 Field Recorded	When a stroke Diagnosis Code is recorded, the Project Number 340 should also be recorded.	Stroke is a high priority health initiative.
N9340-100	Missing or Invalid Value for CT Scan/MRI Scan Within First 24 Hours of ED Arrival When Project 340 Recorded	When Project 340 is recorded, it is mandatory to capture <i>CT scan/MRI scan within first 24 hours of ED arrival</i> whether or not patients with active stroke received a brain image.	Stroke is a high priority health initiative.
N9340-102	Missing or Invalid Value for Administration of Acute Thrombolysis When Project 340 Recorded	When Project 340 is recorded, it is mandatory to complete the field Administration of Acute Thrombolysis whether patients with a active ischemic stroke received acute thrombolysis.	Stroke is a high priority health initiative.
N9340-103	Missing or Invalid Value for Prescription for Anti-thrombotic Medication at Discharge When Project 340 Recorded	When Project 340 is recorded, it is mandatory to complete the field <i>Prescription for anti-thrombotic medication at discharge</i> whether patients with a diagnosis of ischaemic stroke received a prescription for anti-thrombotic medication from the ED.	Stroke is a high priority health initiative.

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OYDQ Test Number	OYDQ Test Title	Short Description	Rationale
N9340-104	Missing or Invalid Value for Referral to Stroke Prevention Services at ED Discharge When Project 340 Recorded	When Project 340 is recorded, it is mandatory to complete the field Referral to Stroke Prevention Services whether patients with a diagnosis of stroke or transient ischemic attack are discharged back to the community directly from the ED receive a referral for stroke prevention follow-up.	Stroke is a high priority health initiative.
N0039-105	Institution To Assigned With Visit Disposition In 12 (Intra-facility transfer to day surgery), 13 (Intra-facility transfer to the emergency department) or 14 (Intra-facility transfer to clinic)	Institution To must be blank when Visit Disposition indicates intra facility transfer.	An Intra-facility transfer to day surgery, emergency department or clinic applies to transfers within the reporting facility. The information is important for patient flow within the system and across sectors.

Open-Year Data Quality Tests

1. Post-Procedure Disorder Code Recorded Without an External Cause Code (N0045-52)

Rule

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

Patient Care Type	All
Submission Level	Level 3
Selection Criteria	Abstracts with a post-procedural disorder diagnosis code (see Appendix A) AND without an external cause code (Y60–Y84 or V01–X59).
Data Elements	Main Problem; Other Problem(s)

2. Status Attribute Not Equal to DX (*Diagnostic*) With Coronary Angiogram (N0047-83)

Rule

The code 3.IP.10.VX *Xray, heart with coronary arteries of left heart structures using percutaneous transluminal arterial (retrograde) approach* must have a status attribute of DX (Diagnostic) when the only intervention performed during ambulatory care visit is coronary angiogram 3.IP.10.VX and there is only one intervention code.

Patient Care Type	All
Submission Level	Level 3
Selection Criteria	Abstracts where only Main Intervention is recorded in the abstract, the intervention code is 3.IP.10.VX and Main Intervention Status Attribute is not equal to DX.
Data Elements	Main Intervention; Other Intervention(s); Main Intervention Attributes Status

3. Stroke Diagnosis Code Without Project 340 Field Recorded (N9340-99)

Rule

Project 340 is mandatory in select jurisdictions. This test will only be completed for those jurisdictions where Project 340 is mandatory.

Project 340 should be completed for all new ischemic and haemorrhagic stroke and transient ischemic attack cases in NACRS Level 3 Emergency Department, where the stroke is recorded as the Main Problem (data element 44):

- I60.- *Subarachnoid haemorrhage (excluding I60.8- Other subarachnoid haemorrhage);*
- I61.- *Intracerebral haemorrhage;*
- I63.- *Cerebral infarction (excluding I63.6 Cerebral infarction due to cerebral venous thrombosis, nonpyogenic);*
- I64 *Stroke, not specified as haemorrhage or infarction;*
- 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).*

Please note that, it is not possible to identify “NEW” stroke cases among the data already submitted with the selection criteria of Project Number 340. Therefore, there may be cases flagged with this test that do not require correction.

Patient Care Type	ED
Submission Level	Level 3
Selection Criteria	<p>Inclusions:</p> <p>Facility Province: ON</p> <p>AND</p> <p>Diagnosis Code of Stroke or TIA: I60.- (excluding I60.8), I61.-, I63.- (excluding I63.6), I64, I67.6, H34.0, H34.1, G45.- (excluding G45.4) recorded as Main Problem (data element 44).</p> <p>Exclusions:</p> <ol style="list-style-type: none"> 1. Cases where the stroke is a complication of poisoning with Diagnosis of T36.0 to T50.9. 2. Cases where the stroke (hemorrhage) is due to a brain neoplasm (C71.-, C79.3, D33.0 - D33.2, D43.0 - D43.2). 3. Cases that are transferred to inpatient within the same reporting facility (Visit Disposition = 06, 07)
Data Elements	Main Problem; Other Problem(s); Project Number

4. Missing or Invalid Value for CT Scan/MRI Scan Within First 24 Hours of ED Arrival When Project 340 Recorded (N9340-100)

Rule

When Project 340 is recorded, it is mandatory to complete the field *CT Scan/MRI Scan Within First 24 Hours of ED Arrival*. This field captures whether or not patients with acute stroke received a brain image within the first 24 hours of arrival at this ED during the ED visit. This test is applicable for all abstracts where Project 340 has been completed, regardless of whether the project is mandatory/optional for a given jurisdiction.

Patient Care Type	ED
Submission Level	Level 3
Selection Criteria	Project 340 is recorded and <i>CT Scan/MRI Scan Within First 24 Hours of ED Arrival</i> is missing or invalid (valid values are Y, N or P).
Data Elements	Project Number; CT Scan/MRI Scan Within First 24 Hours of ED Arrival

5. Missing or Invalid Value for Administration of Acute Thrombolysis When Project 340 Recorded (N9340-102)

Rule

When Project 340 is recorded, it is mandatory to complete the field *Administration of Acute Thrombolysis*. This field captures whether or not patients with acute ischemic stroke received acute thrombolysis. This test is applicable for all abstracts where Project 340 has been completed, regardless of whether the project is mandatory/optional for a given jurisdiction.

Patient Care Type	ED
Submission Level	Level 3
Selection Criteria	Project 340 is recorded and <i>Administration of Acute Thrombolysis</i> is missing or invalid (valid values are Y, N, P, X or 8).
Data Elements	Project Number; Administration of Acute Thrombolysis

6. Missing or Invalid Value for Prescription for Antithrombotic Medication at Discharge When Project 340 Recorded (N9340-103)

Rule

When Project 340 is recorded, it is mandatory to complete the field *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 from the ED. This test is applicable for all abstracts where Project 340 has been completed, regardless of whether the project is mandatory/optional for a given jurisdiction.

Patient Care Type	ED
Submission Level	Level 3
Selection Criteria	Project 340 is recorded and <i>Prescription for Antithrombotic Medication at Discharge</i> is missing or invalid (valid values are Y, N, 8 or 9).
Data Elements	Project Number; Prescription for Antithrombotic Medication at Discharge

7. Missing or Invalid Value for Referral to Stroke Prevention Services at ED Discharge When Project 340 Recorded (N9340-104)

Rule

When Project 340 is recorded, it is mandatory to complete the field *Referral to Stroke Prevention Services at ED Discharge*. This field captures whether patients with a diagnosis of stroke or transient ischemic attack are discharged back to the community directly from the ED receive a referral for stroke prevention follow-up. This test is applicable for all abstracts where Project 340 has been completed, regardless of whether the project is mandatory/optional for a given jurisdiction.

Patient Care Type	ED
Submission Level	Level 3
Selection Criteria	Project 340 is recorded and <i>Referral to Stroke Prevention Services at ED Discharge</i> is missing or invalid (valid values are Y or N).
Data Elements	Project Number; Referral to Stroke Prevention Services at ED Discharge

8. Institution To Assigned With Visit Disposition In 12 (*Intra-facility transfer to day surgery*), 13 (*Intra-facility transfer to the emergency department*) or 14 (*Intra-facility transfer to clinic*) (N0039-105)

Rule

Institution To must be blank when Visit Disposition indicates intra facility transfer.

Patient Care Type	All
Submission Level	Level 3
Selection Criteria	Visit Disposition in (12, 13 or 14) and Institution To is not blank.
Data Elements	Visit Disposition; Institution To

Appendix A—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
- M96.6 Fracture of bone following insertion of orthopaedic implant, joint prosthesis, or bone plate

- 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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