

Hemoglobin (HbA1c) DH24

Codebook

Compiled by NB-IRDT Staff

How to Obtain More Information

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- visit our website at: www.unb.ca/nb-irdt
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About this Codebook

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Due to the operational nature of administrative data sets, there is potential for discrepancies between the names of variables and their corresponding definitions. In the case of such a discrepancy, the variable definition should be considered the most accurate representation.

Overview

Overview of the database

Sample Universe

All New Brunswick residents undergoing Hemoglobin HbA1c blood testing.

Date Range

January 1 2012 to March 31 2019.

Data Source

Department of Health

How to Cite this Codebook

New Brunswick Institute for Research, Data and Training. (2021). Hemoglobin HbA1c DH24 Codebook for Range 2012-01-01 to 2019-03-01. Fredericton, NB: New Brunswick Institute for Research, Data and Training.

Acknowledgements

The Hemoglobin (HbA1c) DH24 Database is used with the permission of "The New Brunswick Department of Health."

About this Product

Purpose of the Product

The purpose of the Hemoglobin (HbA1c) DH24 Database Codebook is to provide information on the linkable New Brunswick Hemoglobin data held at the New Brunswick Institute for Research, Data and Training (NB-IRDT). This data is accessible to researchers for public health research.

Definitions and Concepts

Hemoglobin HbA1c — Blood test that provides information on an individual's average blood sugar level for the previous 2 to 3 months

Used to diagnose diabetes, and routinely used by individuals living with diabetes to confirm their blood sugar levels are staying within safe ranges.

Contents

The Hemoglobin HBA1c data contains the laboratory testing details and values of individuals referred for the test.

General Methodology

Individuals undergoing routine testing for existing conditions, or individuals suspected of having diabetes are referred to laboratory testing which involves blood collection that is tested for Hemoglobin HbA1c levels.

Limitations

N/A

Comparison to Other Products/Versions

DH01c08 - Surveillance System (CCDSS) Diabetes

HbA1c tests that return high values can be indicative of diabetes. As such, both the HBA1c data product and the CCDSS Diabetes data can identify individuals living with diabetes.

However, they do not describe the same population. The CCDSS Diabetes data requires at least two consecutive years of data for a given individual to be captured, while the HBA1c data includes all individuals with laboratory tests for Hemoglobin HbA1c

DH14 – Insulin Pump Program Data

HbA1c tests that return high values can be indicative of diabetes. As such, both the HBA1c data product and the CCDSS Diabetes data can identify individuals living with diabetes. As such, both HbA1c and DH14 can identify individuals living with diabetes.

However, they do not describe the same population. The HBA1c data identify all individuals who received a hemoglobin test during the time of interest—only those who meet the clinical criteria can be considered diabetes cases. Additionally, the HBA1c data has no age restrictions, while the IPP data is restricted to program participants who must be under the age of 25, living with type 1 diabetes, and require of use of an insulin pump.

Using with Other Products

DH01c08 – CCDSS Diabetes Data – The Canadian Chronic Disease Surveillance System for Diabetes contains longitudinal records about chronic health conditions, such as diabetes, flagged using algorithms and administrative data. Linking HBA1c and CCDSS data may provide insights about the history and progression of diabetes as well as resources for managing the disease.

DH05 – Discharge Abstract Data – The Discharge Abstract Data (DAD) is a collection of records of hospitalizations in New Brunswick and contains details regarding patient characteristics, diagnoses, interventions, and healthcare providers. Linkages between the HBA1c and DAD would allow the identification and comparison of HBA1c testing information among hospitalized individuals.

DH08 – NB Physician Billing – The NB Physician Billing data set contains claims for services rendered by healthcare providers, that were paid for through New Brunswick Medicare. Claims associated with the Insulin Pump Program clients can be linked directly using scrambled patient identifiers; however, physician identifiers are not readily available. It may be possible to establish linkages with referring physicians with HBA1c testing information.

DH10 – Citizens Data – The Citizen Database is a longitudinal data set of individuals living in New Brunswick, based on their eligibility for provincial Medicare. Combining the Citizen Database with Insulin Pump Program data may reveal insights about the demographic, geographic, and temporal characteristics of HBA1c testing in New Brunswick.

DH14 – Insulin Pump Program Data – The Insulin Pump program data describes participation in GNBs Insulin pump program. Combining the HBA1c data with the Insulin Pump Program data may reveal insights about the HbA1c testing and values of IPP participants before and during IPP participation.

Record Layouts and Data Descriptions

Overview

If multiple data sets are contained within a database, summarize the database content using the following table format:

#	Name	Unit of Observation	Variables
1	scram_id	scrambled individual ID	C
2	Facility	Facility Number	N
3	FacilityName	Facility Name	C
4	Region	Region	C
5	Zone	Zone	C
6	DateofBirth	Date of Birth	N
7	Gender	Gender	C
8	PostalCode	Postal Code	C
9	ProvincialLoincCode	Provincial Loinc Code	C
10	ViewerEnglishDescription	HbA1c	C
11	CollectionDate	Collection Date	N
12	ResultValue	Result Level Number	C
13	Units	Measurement Unit	C
14	RefRange	Reference Range	C

scram_id

Scrambled individual ID

Code	Description - English	Description - French
First code	Description of first code in English	Description of first code in French (if available)
Second code	Description of second code in English	Description of second code in French (if available)
...

Facility

Facility number

Code	Description - English	Description - French
521	Fredericton and Upper River Valley Nackawick Health Centre	
532	Fredericton Junction Health Centre	
535	Fredericton and Upper River Valley Moncton	...
538	Chipman Health Centre Fredericton and Upper River Valley	
544	Health Services Centre Rexton Moncton	
545		Centre médical régional de Shédiac

711		Kent et Sud-Est PEM unité de Blanche Bourgeois
712		Kent et Sud-Est PEM unité de Shédiac
713		Kent et Sud-Est PEM unité de Kent
731	EMP Woodstock Unit	
732	EMP Perth Unit	
733	EMP Fredericton Unit	
734	EMP Oromocto Unit	
736	Boiestown Health Centre	
751		PEM unité de Restigouche Restigouche
781	EMP (Driscoll and Tantramar Unit)	
801	Dr. Everett Chalmers Regional Hospital Fredericton and Upper River Valley	
805		Hôpital Régional de Campbellton Restigouche
809		Hôpital régional d'Edmundston Madawaska-Victoria
811		Centre Hospitalier Restigouche Restigouche
812	Fredericton and Upper River Valley Stan Cassidy Centre for Rehabilitation	
817	Fredericton and Upper River Valley Harvey Health Centre	
818		Chaleur et Peninsule Acadienne Hôpital et Centre de santé communautaire de Lamèque
820	Moncton The Moncton Hospital	
822	Miramichi Regional Hospital	
823	Fredericton and Upper River Valley Hotel-Dieu of St. Joseph	
824	Fredericton and Upper River Valley Tobique Valley Hospital and Community Health Centre	
826	Moncton Sackville Memorial Hospital	
828	Fredericton and Upper River Valley Stanley Health Centre	
829	Saint John Saint John Regional Hospital	

832	Hotel-Dieu Saint-Joseph de Saint- Quentin Madawaska-Victoria	
835		Chaleur et Peninsule Acadienne Hôpital de Tracadie-Sheila
836	Carleton Memorial Hospital	
839	Chaleur et Peninsule Acadienne Hôpital régional Chaleur	
842		Hôpital général de Grand-Sault Madawaska-Victoria
844	Fredericton and Upper River Valley McAdam Health Centre	
845		Hôpital Stella-Maris-de-Kent Kent et Sud-Est
846	Fredericton and Upper River Valley Oromocto Public Hospital	
848		Centre hospitalier universitaire Dr- Georges-L.-Dumont Kent et Sud-Est
850	Fredericton and Upper River Valley Upper River Valley Hospital	
901	Central Miramichi Community Health Centre Fredericton and Upper River Valley	
902	Fredericton and Upper River Valley Queens North Community Health Centre	
910	Albert County Health and Wellness Centre Moncton	
950		Centre de santé communautaire St. Joseph Restigouche
951		Centre de santé Noreen Richard
957	Gibson Primary Health Clinic	
961		Chaleur et Peninsule Acadienne Hôpital et Centre de santé communautaire de l'Enfant-Jésus RHSJ
963	Downtown Fredericton CHC Fredericton and Upper River Valley	

FacilityName

Facility name

Region

Region

Code	Description - English	Description - French
	Moncton	
	Fredericton and Upper River Valley	
	Saint John	...
	Kent et Sud-Est	
	Chaleur et Péninsule Acadienne	
	Madawaska-Victoria	
	Restigouche	
	Chaleur et Péninsule Acadienne	
	Miramichi	
	The Moncton Hospital	
	Saint John Regional Hospital	
	Centre hospitalier universitaire Dr- Georges-L.-Dumont	
	Dr. Everett Chalmers Regional Hospital	
	Hôpital régional Chaleur	
	Hôpital régional d'Edmundston	
	Hôpital de Tracadie-Sheila	
	Upper River Valley Hospital	
	Hôpital et Centre de santé communautaire de l'Enfant-Jésus RHSJ	
	Oromocto Public Hospital	
	Hôpital Régional de Campbellton	
	Hôpital Stella-Maris-de-Kent	
	Hôpital et Centre de santé communautaire de Lamèque	
	Centre de santé communautaire St. Joseph	
	Hôpital général de Grand-Sault	
	Sackville Memorial Hospital	
	Hotel-Dieu of St. Joseph	
	Health Services Centre Rexton	
	Harvey Health Centre	
	Chipman Health Centre	
	Central Miramichi Community Health Centre	

Boiestown Health Centre
Fredericton Junction Health Centre
Stanley Health Centre
McAdam Health Centre
PEM unité de Restigouche
Downtown Fredericton CHC
PEM unité de Blanche Bourgeois
PEM unité de Shédiac
PEM unité de Kent
Centre Hospitalier Restigouche
Stan Cassidy Centre for Rehabilitation

Zone

Zone.

Code	Description - English	Description - French
RHA1SE	Moncton	Moncton
RHA3	Fredericton	Frédéricton
RHA2	Saint John	Saint Jean
RHA6	Bathurst	Bathurst
RHA1B	Beausejour (Moncton)	Beauséjour (Moncton)
RHA4	Edmundston	Edmundston
RHA5		
RHA7	Miramichi	Miramichi

DateofBirth

Date of birth.

Gender

Gender

Code	Description - English	Description - French
F	Female	
M	Male	
U		

Postal Code

Postal code.

ProvincialLoincCode

Provincial Loinc Code

Code	Description - English	Description - French
4548-4		

ViewerEnglishDescription

HbA1c.

CollectionDate

Collection date.

ResultValue

Result level number.

Units

Measurement unit.

RefRange

Reference range.



Document History

Version	Author	Nature of Change	Date
1.0	Meaghan Pike	Creation	2021-12-15
Approved by		Approval Date	Review Date