Diabetes Identification

OntarioMD i4C Dashboard Indicator

For more information regarding OntarioMD Indicators or the EMR i4C Dashboard Specification, please refer to:

https://www.ontariomd.ca/emr-certification/emr-specification/ontariomd-indicator-library

1. VERSION HISTORY

INDICATOR VERSION	PUBLICATION DATE	REMARKS
1.0	2019-02-18	• Initial release
2.0	2019-07-09	• Added Indicator ID, Indicator Segment ID and Display Indicator Segment properties • Changed format and content of Indicator User Help • Changed format of Source property • Indicator Segment IDs re-sequenced to provide consistency across indicators • Indicator Segment Query Criteria clarifies that query result from a segment should produce a count of patients
2.1	2020-06-15	• Indicator Segment Query wording clarifies that ICD-9 and ICD-10 diagnoses searches should Include all codes within top-level category given • Removal of SNOMET-RT codes recommended since SNOMED-RT has been formally deprecated for use and is no longer supported • Incorrect diabetes exclusion ICD-9 code 90.29 has been changed to correct ICD-9 code 790.29 • Prediabetes ICD-10 codes R73.0* recommended in pre-diabetes code search to provide equivalent codes to ICD-9 790.2 (Abnormal glucose) • Layout of definition file changed to improve readability of indicator segment properties • Description and User Help content now contained in separate document. Description and User Help attributes in definition now contain wording to confirm content is kept separately

2. INDICATOR DEFINITION

2.1 Indicator Properties

PROPERTY	VALUE
Indicator ID	CDM-DIAB-001
Indicator Name	Diabetes Identification
Indicator Version	2.1
Date Published	2020-06-15
Description	Indicator description is part of the User Help content, now maintained in a separate document within the i4C Dashboard Indictor Library.
Source	OntarioMD
Source Description	
Status	Active
Category	CDM
Subcategory	Diabetes
Indicator Order	1
Indicator Graphic Type	Table
Indicator Graphic Notes	
Indicator User Help	User Help content is now maintained in a separate document within the i4C Dashboard Indicator Library.

PROPERTY	VALUE
Indicator Segment Query Notes	**Active Patients** are patients identified as 'Active' in the *Patient Status* data element *(DE01.016)* within *Patient Demographics.* **Diabetes Coded Diagnosis** is any of the following codes captured in the *Diagnosis/Problem (DE06.004)* within *Ongoing Health:* • 250* (ICD-9 Coding System) • E10*, E11* (ICD-10 Coding System) • 46635009, 44054006, 73211009 (SNOMED-CT Coding System) ICD-9 and ICD-10 are hierarchical coding systems built on general categories and (optional) specific subcategories. A **dot separator** is used to separate category from subcategory in representing a code. Some EMR offerings omit the dot separator in representing codes in data capture and EMR data searches. For these EMRs, vendors will omit the dot separator in searches and queries. A category code followed by a dot separator and asterisk (e.g., 250*) means that the search should include the high-level category (250) along with all subcategories within the hierarchy (e.g., 250.0, 250.1, 250.11, etc.) **Diabetes Text Diagnosis or Problem** is any of the following text elements captured in the *Diagnosis/Problem* data elements within *Ongoing Health (DE06.004)* or *Past Medical & Surgical (DE07.004)*: 'diabet', 'DM', or 't2d'. **Bills Containing a Diabetes Diagnosis** are any bills submitted for a patient with diagnosis coded 250 attached. **Documented HbA1c Value** is a value for an HbA1c test result captured in *Laboratory Test Results (DE10.007)*. HbA1c test names may be identified using EMR's proprietary test names, laboratory proprietary test codes or test names, or LOINC codes which cross-reference test names across different EMR and laboratory test names. Test results captured through a lab interface are normally formatted as a decimal value, e.g. .065, but are interpreted as an HbA1c value of 6.5%. **Current Diabetes Medication** is a patient medication recorded in *Medications (DE09)* AND is not a *Past Medication (DE09.017)* ,AND which is identified as a diabetes medication by the presence of any of the following text within the brand or generic medication name: 'Acarbose', 'Glibenclamide', 'Gliclazide', 'Glimepiride', 'Insulin', 'Metformin', 'Sitagliptin', or 'Tolbutamide'. **Other Conditions Exclusion** is identified as any of the following codes captured in the *Diagnosis/Problem* data element *(DE06.004)* within *Ongoing Health*: • 249*, 256.4, 648.8, 775.1, 790.29 *(ICD-9 Coding System)* OR any of the following text elements captured in the *Diagnosis/Problem* data elements within *Ongoing Health (DE06.004)* or *Past Medical & Surgical (DE07.004)*: 'gest', 'PCOS', or 'polycystic ovar'. **Pre-diabetes Exclusion** is identified as any of the following codes captured in the *Diagnosis/Problem* data element *(DE06.004)* within *Ongoing Health:* • 790.2 *(ICD-9 Coding System)* • R73.0* *(ICD-10 Coding System)*

PROPERTY	VALUE
	• 9414007 *(SNOMED-CT Coding System)* OR any of the following text elements captured in the *Diagnosis/Problem* data elements within *Ongoing Health (DE06.004)* or *Past Medical & Surgical (DE07.004)*: 'Pre-diabet', 'Prediabet', 'Pre diabet', 'Borderline diabet', 'Impaired Glucose', 'Impaired Fasting', 'IGT', or 'IFG'. **Diabetes Patient Cohort Exclusion** are patients who are identified for exclusion from consideration for a Diabetes diagnosis. This can be implemented through the creation and utilization of a population cohort specifically created for the purpose of Diabetes diagnosis exclusion. Adoption of a population cohort for this purpose is optional, and query criteria for Diabetes Patient Cohort exclusion will be bypassed in EMRs where the exclusion cohort is not utilized.
Patient List Notes	**Patient Name** is a combination of First Name *(DE01.003)* and Last Name *(DE01.002)* data items from *Patient Demographics*. Names may be displayed either as separate columns or concatenated into one column. **Unique Patient Identifier** is any data item from *Patient Demographics* that can be used by a physician or clinic to uniquely identify a patient when displayed. Examples include *Health Card Number (DE01.008)* or *Chart Number (DE01.012)* **Patient Date of Birth** is captured into *Patient Demographics* as *Date of Birth (DE01.007)*. **Patient Age** is a calculated data item representing the difference between the current date and *Date of Birth (DE01.007)* from *Patient Demographics*. Age should be displayed in years. **Patient Phone Number** is the preferred phone number for contacting a patient and may include *Residence Phone (DE02.007)*, *Cell phone (DE02.008)* or *Work Phone (DE02.009)* from *Patient Address*. **Diabetes Diagnosis codes** is a delimited listing of all diagnosis codes for Diabetes that have been captured in the *Ongoing Health Diagnosis/Problem* data element *(DE06.004)* for a patient. **Diabetes Text Diagnoses** is a delimited listing of all text elements for Diabetes that have been captured in *Ongoing Health Diagnosis/Problem (DE06.004)* or *Past Medical & Surgical History Diagnosis/Problem (DE07.004)* for a patient. **Count of Bills with Diabetes Diagnosis** is a count of bills submitted for a patient with a Diabetes diagnosis attached. **Highest HbA1c Screening** represents the result and/or date for the HbA1c screening documented over the past two years with the highest HbA1c result. **Diabetes Medications** is a delimited listing of all diabetes medications currently prescribed for a patient. **Other Conditions Exclusions** is a delimited listing of all diagnosis codes and/or text elements for conditions that would exclude a patient from consideration for a Diabetes diagnosis. **Pre-Diabetes Exclusions** is a delimited listing of all diagnosis codes and/or text elements for a Pre-Diabetes diagnosis.

2.2 Indicator Segment Properties

Indicator Segment ID	Indicator Segment Label	Display Indicator Segment	Indicator Segment Query Criteria	Patient List Criteria
1	Diabetes Coded	Yes	COUNT OF: Active patients WITH a coded diagnosis of Diabetes	**Mandatory** Patient Name Unique Patient Identifier Patient Date of Birth **Optional** Patient Age Patient Phone Number Diabetes Diagnosis Codes
2	Consider Diabetes: Documented as text but not coded	Yes	COUNT OF: Active patients WITHOUT a coded diagnosis of Diabetes AND WITHOUT Pre-diabetes exclusion AND WITHOUT Other Conditions exclusion AND WITHOUT Diabetes Patient Cohort exclusion AND WITH Diabetes document-ed as text diagnosis or problem	**Mandatory** Patient Name Unique Patient Identifier Patient Date of Birth **Optional** Patient Age Patient Phone Number Diabetes Text Diagnoses
3	Consider Diabetes: Dx in 2+ bills	Yes	COUNT OF: Active patients WITHOUT a coded diagnosis of Diabetes AND WITHOUT Pre-diabetes exclusion AND WITHOUT Other Conditions exclusion	**Mandatory** Patient Name Unique Patient Identifier Patient Date of Birth **Optional** Patient Age Patient Phone Number Count of Bills WITH Diabetes Diagnosis

Indicator Segment ID	Indicator Segment Label	Display Indicator Segment	Indicator Segment Query Criteria	Patient List Criteria
			AND WITHOUT Diabetes Patient Cohort exclusion AND WITH two or more bills containing a Diabetes diagnosis	
4	Consider Diabetes: HbA1c > 6.5%	Yes	COUNT OF: Active patients WITHOUT a coded diagnosis of Diabetes AND WITHOUT Pre-diabetes exclusion AND WITHOUT Other Conditions exclusion AND WITHOUT Diabetes Patient Cohort exclusion AND WITH at least one document-ed HbA1c value > 6.5% in the last 2 years	**Mandatory** Patient Name Unique Patient Identifier Patient Date of Birth **Optional** Patient Age Patient Phone Number Highest HbA1c Screening Value
5	Consider Diabetes: Medications present	Yes	COUNT OF: Active patients WITHOUT a coded diagnosis of Diabetes AND WITHOUT Pre-diabetes exclusion AND WITHOUT Other Conditions exclusion AND WITHOUT Diabetes Patient Cohort exclusion AND WITH one or more Current Diabetes Medication	**Mandatory** Patient Name Unique Patient Identifier Patient Date of Birth **Optional** Patient Age Patient Phone Number Diabetes Medications

Indicator Segment ID	Indicator Segment Label	Display Indicator Segment	Indicator Segment Query Criteria	Patient List Criteria
6	Consider Diabetes: Total	Yes	COUNT OF: Active patients WITHOUT a coded diagnosis of Diabetes AND WITHOUT Pre-diabetes exclusion AND WITHOUT Other Conditions exclusion AND WITHOUT Diabetes Patient Cohort exclusion AND WITH one or more Current Diabetes Medications AND WITH (Diabetes documented as text diagnosis or problem OR 2 or more bills containing a Diabetes diagnosis OR at least one document-ed HbA1c value > 6.5% in the last 2 years OR one or more Current Diabetes Medications }	**Mandatory** Patient Name Unique Patient Identifier Patient Date of Birth **Optional** Patient Age Patient Phone Number Diabetes Text Diagnoses Count of Bills WITH Diabetes Diagnosis Highest HbA1c Screening Value Diabetes Medications
7	Diabetes Exclusion: Other Conditions	Yes	COUNT OF: Active patients WITHOUT a coded diagnosis of Diabetes AND WITH Other Conditions exclusion	**Mandatory** Patient Name Unique Patient Identifier Patient Date of Birth **Optional** Patient Age Patient Phone Number Other Conditions Exclusions

Indicator Segment ID	Indicator Segment Label	Display Indicator Segment	Indicator Segment Query Criteria	Patient List Criteria
8	Diabetes Exclusion: Pre-Diabetes	Yes	COUNT OF: Active patients WITHOUT a coded diagnosis of Diabetes AND WITH Pre-Diabetes exclusion	**Mandatory** Patient Name Unique Patient Identifier Patient Date of Birth **Optional** Patient Age Patient Phone Number Pre-Diabetes Exclusions
9	Diabetes Exclusion Cohort	Yes	COUNT OF: Active patients WITHOUT a coded diagnosis of Diabetes AND WITH Diabetes Patient Cohort exclusion	**Mandatory** Patient Name Unique Patient Identifier Patient Date of Birth **Optional** Patient Age Patient Phone Number