Diabetes status

Important note: This is an archived metadata standard from the AIHW Knowledgebase. For current metadata standards and related information please access METeOR, the AIHW's Metadata Online Registry at http://meteor.aihw.gov.au

Identifying and Definitional Attributes

Data Dictionary: NHDD

Knowledgebase ID: 000654 Version number: 1

Metadata type: DATA ELEMENT

Registration NHIMG Admin status: SUPERSEDED

Authority: Effective date: 01-MAR-05

Definition: Identifies a person with or at risk of diabetes.

Context: Public health, health care and clinical settings.

Relational and Representational Attributes

Datatype: Numeric

Representational CODE

form:

Representation NN

layout:

Minimum Size: 2 Maximum Size: 2

Data Domain: 01 Type 1 Diabetes

02 Type 2 Diabetes

O3 Gestational Diabetes Mellitus (GDM)

Other (Secondary Diabetes)

O5 Previous Gestational Diabetes Mellitus (GDM)

1FG (impaired fasting glucose)
 1GT (impaired glucose tolerance)
 Not diagnosed with diabetes

09 Not assessed

99 Not stated/Inadequately described

Guide For Use: Note that where there is a GDM or Previous GDM (i.e. data

domain 3 & 5) and a current history of Type 2 Diabetes then

record 'Code 2' Type 2 Diabetes.

This same principle applies where a history of either Impaired fasting glycaemia (IFG) or Impaired glucose tolerance (IGT) and a current history and Type 2 Diabetes, then record 'Code 2' Type 2

Diabetes.

Code 01 Type 1 Diabetes:

Beta-cell destruction, usually leading to absolute insulin deficiency. Includes those cases attributed to an autoimmune process, as well as those with beta-cell destruction and who are prone to ketoacidosis for which neither an aetiology nor pathogenesis is known (idiopathic). It does not include those forms of beta-cell destruction or failure to which specific causes can be assigned (e.g. cystic fibrosis, mitochondrial defects). Some subjects with this Type can be identified at earlier clinical stages than 'diabetes mellitus'.

Code 02 Type 2 Diabetes:

Type 2 includes the common major form of diabetes, which results from defect(s) in insulin secretion, almost always with a major contribution from insulin resistance.

Code 03 Gestational Diabetes Mellitus (GDM):

GDM is a carbohydrate intolerance resulting in hyperglycaemia of variable severity with onset or first recognition during pregnancy. The definition applies irrespective of whether or not insulin is used for treatment or the condition persists after pregnancy. Diagnosis is to be based on the Australian Diabetes in Pregnancy Society (ADIPS) Guidelines.

Code 04 Other (Secondary Diabetes)

This categorisation include less common causes of diabetes mellitus, but are those in which the underlying defect or disease process can be identified in a relatively specific manner. They include, for example, genetic defects of beta-cell function, genetic defects in insulin action, diseases of the exocrine pancreas, endocrinopathies, drug or chemical-induced, infections, uncommon forms of immune-mediated diabetes, other genetic syndromes sometimes associated with diabetes.

Code 05 Previous GDM Where the person has a history of GDM.

Code 06 Impaired fasting glycaemia (IFG)

IFG or 'non-diabetic fasting hyperglycaemia' refers to fasting glucose concentrations, which are lower than those required to diagnose diabetes mellitus but higher than the normal reference range. An individual is considered to have IFG if they have a fasting plasma glucose of 6.1 or greater and less than 7.0 mmol/L if challenged with an oral glucose load, they have a fasting

plasma glucose concentration of 6.1 mmol/L or greater, but less than 7.0 mmol/L, AND the 2 hour value in the Oral Glucose Tolerance Test (OGTT) is less than 7.8 mmol/L.

Code 07 Impaired glucose tolerance (IGT):

IGT is categorised as a stage in the natural history of disordered carbohydrate metabolism; subjects with IGT have an increased risk of progressing to diabetes. IGT refers to a metabolic state intermediate between normal glucose homeostasis and diabetes. Those individuals with IGT manifest glucose intolerance only when challenged with an oral glucose load. IGT is diagnosed if the 2 hour value in the OGTT is greater than 7.8 mmol/L. and less than 11.1 mmol/L AND the fasting plasma glucose concentration is less than 7.0 mmol/L.

Code 08 Not diagnosed with diabetes.

The subject has no known diagnosis of Type 1, Type 2, GDM, Previous GDM, IFG, IGT or Other (Secondary Diabetes).

Code 09 Not assessed.

The subject has not had their diabetes status assessed.

Code 99 is for unknown or information unavailable

Collection Methods: The diagnosis is derived from and must be substantiated by clinical documentation.

Diabetes (clinical):

A type of diabetes should be recorded and coded for each episode

of patient care.

Related metadata: is used in conjunction with Service contact date version 1 relates to the data element Date of diagnosis version 1 relates to the data element Diabetes therapy type version 1

Administrative Attributes

Source Document: Developed based on Definition, Diagnosis and Classification of

Diabetes Mellitus and its Complications Part 1: Diagnosis and Classifications of Diabetes Mellitus Provisional Report of a WHO

Consultation (Alberti & Zimmet 1998).

Source Organisation: CV-Data Working Group

National Diabetes Data Working Group

Comments: DSS - Cardiovascular disease (clinical):

People with diabetes have two to five times increased risk of developing heart, stroke and vascular disease (Zimmet & Alberti 1997).

Cardiovascular disease is the most common cause of death in people with diabetes.

Diabetes is also an important cause of stroke, and people with diabetes may have a worse prognosis after stroke.

Heart, stroke and vascular disease and diabetes share common risk factors, but also diabetes is an independent risk factor for heart, stroke and vascular disease.

During the 1995 National Health Survey, about 15 per cent of those with diabetes reported having heart disease, at almost six times the rate noted among people without diabetes. In 1996-97, almost one in six hospital separations, with coronary heart disease as any listed diagnosis, also had diabetes recorded as an associated diagnosis. Heart disease appears earlier in life and is more often fatal among those with diabetes.

Diabetes may accentuate the role of elevated blood pressure in stroke. The incidence and prevalence of peripheral vascular disease in those with diabetes increase with the duration of the peripheral vascular disease.

Mortality is increased among patients with peripheral vascular disease and diabetes, in particular if foot ulcerations, infection or gangrene occur. There is limited information on whether the presence of heart, stroke and vascular disease promotes diabetes in some way.

High blood pressure, high cholesterol and obesity are often present along with diabetes.

As well as all being independent cardiovascular risk factors, when they are in combination with glucose intolerance (a feature of diabetes) and other risk factors such as physical inactivity and smoking, these factors present a greater risk for heart, stroke and vascular disease.

Evidence is accumulating that high cholesterol and glucose intolerance, which often occur together, may have a common aetiological factor. Despite these similarities, trends in cardiovascular mortality and diabetes incidence and mortality are moving in opposite directions.

While the ageing of the population following reductions in cardiovascular mortality may have contributed to these contrasting trends, the role of other factors also needs to be clearly understood if common risk factor prevention strategies are to be considered. (From Commonwealth Department of Health & Aged Care and Australian Institute of Health and Welfare (1999) National Health

Priority Areas Report: Cardiovascular Health).

In settings such as general practice where the monitoring of a person's health is ongoing and where diabetes status can change over time, the service contact date should be recorded.

DSS - Diabetes (clinical):

Uncontrolled diabetes leads to a variety of complications, often resulting in limitation of activity, disability, illness and premature mortality. Therefore ongoing assessment is required to identify people at risk of developing complications so that early preventive strategies can be applied. Although there is no cure for diabetes, with modern treatment most people can lead a full and active life and avoid long-term complications.

Aetiological classifications contained in the scientific paper "Definition, Diagnosis and Classification of Diabetes Mellitus and its Complications Part 1: Diagnosis and Classifications of Diabetes Mellitus Provisional Report of a WHO Consultation (Alberti & Zimmet 1998)".

Data Element Links

Information Model Entities linked to this Data Element

NHIM Physical wellbeing

Data Agreements which include this Data Element

DSS - Cardiovascular disease (clinical) From 01-Jan-03 to
DSS - Diabetes (clinical) From 01-Jan-03 to
DSS - Acute coronary syndrome (clinical) From 04-Jun-04 to