Cholesterol-total - measured

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:	000653	Version number:	1
Metadata type:	DATA ELEMENT		
Registration Authority:	NHIMG	Admin status:	SUPERSEDED
		Effective date:	01-MAR-05

Definition: A person's measured total cholesterol (TC).

Context: Public health, health care and clinical settings.

Relational and Representational Attributes

Datatype:	Numeric
Representational form:	QUANTITATIVE VALUE
Representation layout:	NN.N
Minimum Size:	3
Maximum Size:	4

Data Domain:		
	99.9	Not stated / inadequately described
	NOVAL	Measured value recorded in mmol / L to one decimal place

Guide For Use: Record the absolute result of the TC measurement.

When reporting, record whether or not the measurement of Cholesterol-total - measured was performed in a fasting specimen.

DSS - Diabetes (clinical):
When reporting, record absolute result of the most recent Cholesterol-total - measured in the last 12 months to the nearest 0.1 mmol / L.

Collection Methods: Measurement of lipid levels should be carried out by laboratories, or practices, which have been accredited to perform these tests by the National Association of Testing Authorities.
-To be collected as a single venous blood sample, preferably following a 12-hour fast where only water and medications have

been consumed.
-Prolonged tourniquet use can artefactually increase levels by up to 20%.

Related metadata: is used in conjunction with Service contact date version 1
relates to the data element Cholesterol-HDL - measured version 1
is used in the calculation of Cholesterol-LDL calculated version 1
relates to the data element Triglycerides - measured version 1
relates to the data element Dyslipidaemia - treatment version 1
is used in conjunction with Fasting status version 1

Administrative Attributes

Source Document: National Heart Foundation of Australia and the Cardiac Society of Australia and New Zealand, Lipid Management Guidelines - 2001, MJA 2001; 175: S57-S88

National Health Priority Areas Report: Cardiovascular Health 1998. AIHW Cat. No. PHE 9. HEALTH and AIHW, Canberra.

The Royal College of Pathologists of Australasia web based Manual of Use and Interpretation of Pathology Tests

Source Organisation: CV-Data Working Group

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

High blood cholesterol is a key factor in heart, stroke and vascular disease, especially coronary heart disease.

Poor nutrition can be a contributing factor to heart, stroke and vascular disease as a population's level of saturated fat intake is the prime determinant of its level of blood cholesterol.

DSS - Cardiovascular disease (clinical):
Scientific studies have shown a continuous relationship between lipid levels and coronary heart disease and overwhelming evidence that lipid lowering interventions reduce coronary heart disease progression, morbidity and mortality. Studies show a positive relationship between an individual's total blood cholesterol level and risk of coronary heart disease as well as death (Kannel & Gordon 1970; Pocock et al. 1989).

Many studies have demonstrated the significance of blood cholesterol components as risk factors for heart, stroke and

vascular disease.

Several generalisations can be made from these cholesterol lowering trials:
-That the results of the intervention trials are consistent with the prospective population studies in which (excluding possible regression dilution bias) a 1.0 mmol / L reduction in plasma total cholesterol translates into an approximate 20% reduction in the risk of future coronary events.
-It should be emphasised, however, that this conclusion does not necessarily apply beyond the range of cholesterol levels which have been tested in these studies, and
-That the benefits of cholesterol lowering are apparent in people with and without coronary artery disease.

There is high level evidence that in patients with existing coronary heart disease, lipid intervention therapy reduces the risk of subsequent stroke.

DSS - Diabetes (clinical):
The risk of coronary and other macrovascular disorders is 2-5 times higher in people with diabetes than in non-diabetic subjects and increases in parallel with the degree of dyslipidaemia.

Following Principles of Care and Guidelines for the Clinical Management of Diabetes Mellitus, the targets for lipids management are:
-To reduce total Cholesterols to less than 5.5 mmol / L
-To reduce triglyceride levels to less than 2.0 mmol / L
-To increase high density lipoprotein Cholesterols to more than or equal to 1.0 mmol / L.

If pre-existing cardiovascular disease (bypass surgery or myocardial infarction), total cholesterol should be less than 4.5 mmol / L.

Large clinical trials have shown that people at highest risk of cardiovascular events (e.g. pre-existing ischaemic heart disease) will derive the greatest benefit from lipid lowering drugs. For this group of patients, the optimum threshold plasma lipid concentration for drug treatment is still a matter of research. In May 1999 the PBS threshold total cholesterol concentration, for subsidy of drug treatment, was reduced from 5.5 to 4.0 mmol / L. (Australian Medical Handbook).

Data Element Links

Information Model Entities linked to this Data Element

NHIM	Service provision event

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