Data Set Specification

Acute coronary syndrome (clinical)

National Health Data Dictionary
Version 12 Supplement

The Australian Institute of Health and Welfare is Australia's national health and welfare statistics and information agency. The Institute's mission is *better health and wellbeing for Australians through better health and welfare statistics and information*.

Data Set Specification

Acute coronary syndrome (clinical)

National Health Data Dictionary
Version 12 Supplement

Health Data Standards Committee
2004

Australian Institute of Health and Welfare
Canberra

AIHW Catalogue Number HWI 70

A complete list of the Institute's publications is available from the Media and Publishing Unit, Australian Institute of Health and Welfare, GPO Box 570, Canberra ACT 2601, or via the Institute's web site at http://www.aihw.gov.au.

ISSN 1329 4555

ISBN 1 74024 394 3

Suggested citation

National Health Data Committee 2004. Other Data Set Specification, Acute coronary syndrome (clinical), National Health Data Dictionary. Version 12 Supplement. AIHW Catalogue No. HWI 70 . Canberra: Australian Institute of Health and Welfare.

Australian Institute of Health and Welfare

Director
Dr Richard Madden

Any inquiries about or comments on this publication should be directed to:

National Data Development and Standards Unit
Australian Institute of Health and Welfare
GPO Box 570
Canberra ACT 2601

Phone: (02) 6244 1054

Fax: (02) 6244 1166

Published by the Australian Institute of Health and Welfare

Printed by New Millennium Print

Preface

This publication includes data elements included in *National Health Data Dictionary Version 12 Supplement* that relate specifically to the Acute coronary syndrome (clinical) Data Set Specification. It is included as a separate publication to facilitate the use of these standards by clinicians involved in the care of patients presenting with Acute coronary syndrome. It is hoped that it will contribute to uniform data collection and research collaboration, greater accuracy in evaluating the impact of the expanding therapeutic options in these clinical areas, as well as leading to improvements in the quality of care through standardised outcome evaluation.

The data set was developed by a working group of the National Heart Foundation of Australia (NHFA) and the Cardiac Society of Australia and New Zealand (CSANZ). This working group sought to include broad representation from many interested organisations within the field.

The Acute coronary syndrome (clinical) DSS was endorsed by the National Health Information groups (NHIG) on the 4th of June 2004.

Data Set Specifications (DSS) are metadata sets that are not mandated for collection but are recommended as best practice. It is recommended that, if collecting data for the purposes of primary patient care, planning or analysis, the entire DSS be collected.

The following pages contain the Acute Coronary Syndrome (clinical) DSS and its associated data elements and data element concepts.

Introduction

Acute coronary syndrome (ACS) represent a broad spectrum of clinical presentations, spanning ST elevation myocardial infarction through to an accelerated pattern of angina without evidence of myonecrosis. Yet, this diverse clinical syndrome is now known to be bound by a common underlying pathophysiology, that of: coronary inflammation; epicardial plaque rupture or erosion; coronary thrombosis and distal embolisation finally leading to myocardial ischemia and/or infarction. Currently, acute coronary syndromes account for over 25,000 deaths per year in Australia (AIHW 2001), coupled with an enormous burden of acute in-hospital clinical care and disability. In this area of medicine, optimal patient outcomes depend on rapid diagnosis, accurate risk stratification and the effective implementation of proven therapies and treatment strategies among specifically defined at risk groups. Fortunately, clinical trial and registry data informing the management of acute coronary syndromes are extensive. These trials have provided clinicians with a continually expanding array of therapies. Importantly, these data have been formulated into clinical practice guidelines for the management of ACS.

Yet, the real challenge that remains is in the effective application of this evidence within the complexity and diversity, which is the reality of everyday clinical practice. Despite this wealth of clinical trial evidence, a divide between the outcomes observed in clinical practice and those documented in clinical trials remains evident, partly attributable to an under-representation of elderly and high-risk patients. Such a gulf is not surprising given the primary objective of most clinical trials is to demonstrate efficacy of a particular therapy or strategy, while clinical effectiveness is dependent on many factors often not well described (but potentially modified) in clinical trials. As recognised by many, registries that are more representative of the entire spectrum of clinical practice are key to understanding the link between evidence-based medicine, clinical practice and patient outcome. They are essential to quality improvement initiatives, and are valuable in validating the effectiveness of costly therapies. A national standard for the data elements monitoring the clinical management of patients with ACS would facilitate these efforts.

The Acute Coronary Syndrome (clinical) Data Set Specifications are elements considered useful for the clinical management of patients presenting with an acute coronary syndrome spanning the entire spectrum of this disease entity. It is intended for use by clinicians practicing within the hospital or acute care environment. This dataset was developed under the auspices of the National Heart Foundation of Australia and the Cardiac Society of Australia and New Zealand, using the data elements proposed by the American College of Cardiology Task Force on Clinical Data Standards (J Am Coll Cardiol 2001;38(7):2114-30) as a foundation. The ACS-data set consists of 65 new elements, though the collection of all elements is not mandated. The choice of elements for inclusion in the Acute Coronary Syndrome (clinical) Data Set Specification have focused on those considered useful in defining risk at the time of presentation and the processes of clinical care, with the expectation that optimal coupling of risk and therapies will provide optimal clinical outcomes. It is envisaged that not all elements will be useful to all users of this data. However, these elements should serve as standardised definitions to the data elements considered locally appropriate and useful to meet local data needs, while enabling collaboration among centres with similar data collection interest. The underlying goals of this initiative are to: facilitate the routine collection of standardised data on acute coronary syndromes; aid in the accurate risk stratification of patients enabling optimal use of therapies, and therefore provide improvements in late clinical outcomes; while assisting in population based research initiatives.

Dr. Derek Chew

Chair, Acute Coronary Syndrome Data Set Working Group (ACSDWG)

Contents

Acute Coronary Syndrome (clinical) DSS

Admin. Status: CURRENT Version number: 1

Metadata type: Data Set Specification

Start date: 04/06/2004

Scope: The collection of acute coronary syndrome core data (ACS-Data) is a voluntary data collection with individual hospitals or health service areas developing collection methods and policies appropriate for their service.

Acute coronary syndromes reflect the spectrum of coronary artery disease resulting in acute myocardial ischaemia, and span unstable angina, non-ST segment elevation myocardial infarction (NSTEMI) and ST-segment elevation myocardial infarction (STEMI). Clinically these diagnoses encompass a wide variation in risk, require complex and time urgent risk stratification and represent a large social and economic burden.

The definitions used in ACS-Data are designed to underpin the data collected by health professionals in their day-to-day acute care practice. They relate to the realities of an acute clinical consultation for patients presenting with chest pain/ discomfort and the need to correctly identify, evaluate and manage patients at increased risk of a coronary event.

The data elements specified in this metadata set provide a framework for:

1. promoting the delivery of evidenced-based acute coronary syndrome management care to patients;
2. facilitating the ongoing improvement in the quality and safety of acute coronary syndrome management in acute care settings in Australia and New Zealand;
3. improving the epidemiological and public health understanding of this syndrome; and
4. supporting acute care services as they develop information systems to complement the above.

This is particularly important as the scientific evidence supporting the development of the data elements within ACS-Data indicate that accurate identification of the evolving myocardial infarction patient or the high/intermediate risk patient leading to the implementation of the appropriate management pathway impacts on the patient's outcome. Having a nationally recognised set of definitions in relation to defining a patient's diagnosis, risk status and outcomes is a prerequisite to achieving the above aims.

ACS-Data are based on the American College of Cardiology (ACC) Data Set for Acute Coronary Syndrome as published in the Journal of the American College of Cardiology in December 2001 (38:2114–30) as well as more recent scientific evidence around the diagnosis of myocardial infarction. The data elements are alphabetically listed and grouped in a similar manner to the American College of Cardiology's data set format. These features of the Australian ACS data set should ensure that the data is internationally comparable.

The data elements described here have been identified as high priority for inclusion in the *NHDD* for the collection of data relating to ACS management, along with supporting elements already existing within the NHDD (as listed). It is recommended that other data elements be collected as best practice — however, these are not listed here, as they are considered to be of a secondary priority. Such data elements include date of Coronary Artery Bypass Grafting (CABG), Percutaneous Coronary Intervention (PCI) and diagnostic cardiac catheterisation/angiography and recording the number of units of blood transfused.

However, the working group will approach the Australian Institute of Health and Welfare (AIHW) to list such non-core ACS data elements on the AIHW Knowledgebase website.

Many of the data elements in this metadata set may also be used in the collection of other cardiovascular clinical information.

Where appropriate, it may be useful if the data definitions in this metadata set were used to address data definition needs in non-clinical environments such as public health surveys etc. This could allow for qualitative comparisons between data collected in, and aggregated from, clinical settings (i.e. using application of ACS-Data), with that collected through other means (e.g. public health surveys, reports).

A set of core ACS data elements and standardised definitions can inform the development and conduct of future registries at both the national and local level.

The working group formed under the National Heart Foundation of Australia (NHFA) and the Cardiac Society of Australia and New Zealand (CSANZ) initiative was diverse and included representation from the following organizations: the NHFA, the CSANZ, the Australasian College of Emergency Medicine, the Australian Institute of Health and Welfare, the Australasian Society of Cardiac & Thoracic Surgeons, Royal Australasian College of Physicians (RACP), RACP — Towards a Safer Culture, National Centre for Classification in Health (Brisbane), the NSW Aboriginal Health & Medical Research Council, the George Institute for International Health, the School of Population Health at the University of Western Australia and the National Cardiovascular Monitoring System Advisory Committee.

To ensure the broad acceptance of the data set, the working group also sought consultation from the heads of cardiology departments, other specialist professional bodies and regional key opinion leaders in the field of acute coronary syndromes.

Collection methodology:

This metadata set is primarily concerned with the clinical use of ACS-Data. Acute care environments such as hospital emergency departments, coronary care units or similar acute care areas are the settings in which implementation of the core ACS data set should be considered. A wider range of health and health-related establishments that create, use or maintain, records on health care clients, could also use it.

Please note that this is a Data Set Specification (DSS) and therefore not a mandatory collection. This means that there is flexibility for the data collected for this DSS as it does not have to be 'compliant' with the data domain specified in the *NHDD*. 'Compliant' data is data that meets all requirements of the national standard. Although it is desirable that the data is collected exactly as specified in the data domain, 'consistent' data may be collected in a different format which is consistent with the national standard, as long as it can be directly mapped back to the originally specified data domain. Data that cannot be converted back to the specified data domain is considered to be 'inconsistent' with national standards and therefore invalid for mandatory collections i.e. National Minimum Data Sets.

Data elements included:

Baseline characteristics

Concurrent clinical condition — on presentation, version 1

Clinical evidence status, version 1

Country of birth, version 4

Date of birth, version 5

Diabetes status, version 1

Height self reported, version 2

Indigenous status, version 5

Myocardial infarction history, version 1

Person Identifier, version 2

Premature cardiovascular disease family history – status, version 1

Sex, version 4

Tobacco smoking status, version 1

Vascular history, version 1

Weight self-reported, version 2

Clinical presentation

Blood pressure – diastolic measured, version 1

Blood pressure – systolic measured, version 1

Chest pain pattern category, version 1

Date of triage, version 1

Date patient presents, version 2

Heart rate, version 1

Killip classification code, version 1

Time of triage, version 1

Time patient presents, version 2

Triage category, version 1

Type of visit to the emergency department, version 2

ECG findings

Electrocardiogram (ECG) change – location, version 1

Electrocardiogram (ECG) change – type, version 1

Heart rhythm type, version 1

Laboratory tests

Cholesterol-HDL — measured, version 1

Cholesterol-LDL — calculated, version 1

Cholesterol-total — measured, version 1

Creatine kinase MB isoenzyme (CK-MB) — measured, version 1

Creatine kinase MB isoenzyme (CK-MB) — units, version 1

Creatine kinase MB isoenzyme (CK-MB) — upper limit of normal range, version 1

Creatinine serum – measured, version 1

Date Creatine kinase MB isoenzyme (CK-MB) measured, version 1

Date troponin measured, version 1

Time Creatine kinase MB isoenzyme (CK-MB) measured, version 1

Time troponin measured, version 1

Triglycerides – measured, version 1

Troponin – assay type, version 1

Troponin assay — upper limit of normal, version 1

Troponin measured, version 1

Diagnosis/risk stratification

Acute coronary syndrome stratum, version 1

Acute coronary syndrome procedure type, version 1

Clinical procedure timing status, version 1

Cardiac Procedures

Date of first angioplasty balloon inflation/stenting, version 1

Functional stress test element, version 1

Functional stress test ischaemic result, version 1

Time of first angioplasty balloon inflation/stenting, version 1

Medications

Angiotensin converting enzyme (ACE) inhibitor therapy status, version 1

Aspirin therapy status, version 1

Beta-blocker therapy status, version 1

Clopidogrel therapy status, version 1

Fibrinolytic therapy status, version 1

Fibrinolytic drug used, version 1

Glycoprotein IIb/IIIa receptor antagonist status, version 1

Lipid-lowering therapy status, version 1

Date of intravenous fibrinolytic therapy, version 1

Time of intravenous fibrinolytic therapy, version 1

Outcomes

Bleeding episode using TIMI criteria — status, version1

Date of referral to rehabilitation, version 1

Separation date, version 5

Mode of separation, version 3

Reason for readmission – acute coronary syndrome, version1

Acute coronary syndrome procedure type

Identifying and Definitional attributes

Knowledgebase ID: ***001019*** ***Version number:*** ***1***

Metadata type: Data element

Definition:	The type of procedure performed, that is pertinent to the treatment of acute coronary syndrome.
Context:	Acute coronary syndrome treatment settings.

Relational and representational attributes

Data type: Numeric ***Maximum field size:*** 2

Representational class: Code ***Format:*** NN

Data domain:

01	coronary artery bypass graft (CABG)
02	coronary stent (bare metal)
03	coronary stent (drug-eluding)
04	angioplasty
05	reperfusion fibrinolytic therapy
06	reperfusion primary percutaneous coronary intervention (PCI)
07	rescue angioplasty/stenting
08	vascular reconstruction, bypass surgery, or percutaneous intervention to the extremities or for aortic aneurysm
09	amputation for arterial vascular insufficiency
10	diagnostic cardiac catheterisation/angiography
11	blood transfusion
12	insertion of pacemaker
13	implantable cardiac defibrillator
14	intra-aortic balloon pump (IABP)
15	non-invasive ventilation (CPAP)
16	invasive ventilation
17	defibrillation
88	other
99	not stated/inadequately described

Guide for use:

More than one procedure may be recorded.

Record only those codes that apply.

Record all codes that apply.

When read in conjunction with Clinical procedure timing status, this data element provides information on the procedure(s) provided to a patient prior to or during admission.

When read in conjunction with Acute coronary syndrome stratum, codes 01 to 10 of this data element provide information for risk stratification.

Verification rules: Codes 88 and 99 cannot be used in multiple entries.

Collection methods: At admission, each procedure performed for the treatment of acute

coronary syndrome prior to that admission should be recorded in conjunction with the data element Clinical procedure timing status (i.e. code 1).

Each procedure performed for the treatment of acute coronary syndrome during the episode of admitted patient care should also be recorded in conjunction with the data element Clinical procedure timing status (i.e. code 2).

Related metadata: Is used in conjunction with the data element Clinical procedure timing status, version 1.

Is used in conjunction with the data element Acute coronary syndrome stratum, version 1.

Information model link: NHIM Acute event

Information framework link:

Data Set Specifications:	***Start date***	***End date***
DSS – Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 04/06/2004

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Registration authority: National Health Information Group.

Steward: The National Heart Foundation of Australia.

The Cardiac Society of Australia and New Zealand.

Comments:

Acute coronary syndrome stratum

Identifying and Definitional attributes

Knowledgebase ID: ***001021*** ***Version number:*** ***1***

Metadata type: Data element

Definition:	Risk stratum of the patient presenting with clinical features consistent with an acute coronary syndrome (chest pain or overwhelming shortness of breath (SOB)) defined by accompanying clinical, electrocardiogram (ECG) and biochemical features.
Context:	Health care and clinical settings. The clinical, electrocardiogram and biochemical characteristics are important to enable early risk stratification.

Relational and representational attributes

Data type: Numeric ***Maximum field size:*** 1

Representational class: Code ***Format:*** N

Data domain:	1	with ST elevation (myocardial infarction)
	2	with non-ST elevation ACS with high-risk features
	3	with non-ST elevation ACS with intermediate-risk features
	4	with non-ST elevation ACS with low-risk features
	9	not reported

Guide for use:

Code 1 with ST elevation (myocardial infarction), used where persistent ST elevation of ≥1mm in two contiguous limb leads, or ST elevation of ≥2mm in two contiguous chest leads, or with left bundle branch block (BBB) pattern on the ECG.
This classification is intended for identification of patients potentially eligible for reperfusion therapy, either pharmacologic or catheter-based. Other considerations such as the time to presentation and the clinical appropriateness of instituting reperfusion are not reflected in this data element.

Code 2 with non-ST elevation ACS with high-risk features, used when presentation with clinical features consistent with an acute coronary syndrome (chest pain or overwhelming SOB) with high-risk features which include either:

- classical rise and fall of at least one cardiac biomarker (troponin or CK-MB),
- persistent or dynamic ECG changes of ST segment depression $\underline{\geq}$ 0.5mm or new T wave inversion in three or more contiguous leads,
- transient (< 20 minutes) ST segment elevation ($\underline{\geq}$ 0.5 mm) in more than 2 contiguous leads,
- haemodynamic compromise: Blood pressure < 90 mmHg systolic, cool peripheries, diaphoresis, Killip Class > 1, and/or new onset mitral regurgitation, and/or syncope, or
- presence of known diabetes without persistent ST elevation of > 1mm in two or more contiguous leads or new or presumed new bundle branch block (BBB) pattern on the initial ECG, i.e. not meeting the definition for ST elevation MI.

This classification is intended for identification of patients potentially eligible for early invasive management and the use of intravenous glycoprotein IIb/IIIa inhibition.

Code 3 with non-ST elevation ACS with intermediate-risk features, used when presentation with clinical features consistent with an acute coronary syndrome (chest pain or overwhelming SOB) with intermediate-risk features which include either:

- prolonged but resolved chest pain/discomfort at rest < 48 hours,
- age greater than 65yrs,
- known coronary heart disease: prior MI, prior revascularisation, known coronary lesion > 50%,
- pathological Q waves or ECG changes of ST deviation < 0.5mm or minor T wave inversion in less than 3 contiguous leads,
- nocturnal pain,
- two or more risk factors of known hypertension, family history, active smoking or hyperlipidaemia, or
- prior aspirin use and not meeting the definition for ST elevation MI or Non-ST elevation with high-risk features.

This classification is intended for identification of patients potentially eligible for admission and in-hospital investigation that may or may not include angiography.

Code 4 with non-ST elevation ACS with low-risk features, used when presentation with clinical features consistent with an acute coronary syndrome (chest pain or overwhelming SOB) without features of ST elevation MI or Non-ST elevation ACS with intermediate or high-risk features.

This classification is intended for identification of patients potentially eligible for outpatient investigation.

Other clinical considerations influencing the decision to admit and investigate are not reflected in this data element. This data element is intended to simply provide a diagnostic classification at the time of, or within hours of clinical presentation.

Verification rules:

Collection methods: Collected at time of presentation.

Only one code should be recorded.

Related metadata: Is qualified by Creatine kinase MB isoenzyme (CK-MB) measured, version 1.

Is qualified by Chest pain pattern category, version 1.

Is qualified by Concurrent clinical condition — on presentation, version 1.

Is qualified by Electrocardiogram (ECG) change — type, version 1.

Is qualified by Functional stress test ischaemic result, version 1.

Is qualified by Killip classification code, version 1.

Is used in conjunction with Acute coronary syndrome procedure type, version 1.

Is used in conjunction with Clinical procedure timing status, version 1

Is a qualifier of Reason for readmission – Acute coronary syndrome, version 1.

Is qualified by Troponin measured, version 1.

Information model link: NHIM Acute event

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 04/06/2004

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document: *Management of Unstable Angina Guidelines – 2000*, The National Heart Foundation of Australia, The Cardiac Society of Australia and New Zealand MJA, 173 (Supplement) S65–S88 Antman, MD; et al.

The TIMI Risk Score for Unstable Angina/Non–ST Elevation MI JAMA. 2000; 284:835–842.

Registration authority: National Health Information Group.

Steward: The National Heart Foundation of Australia.

The Cardiac Society of Australia and New Zealand.

Comments:

Angiotensin converting enzyme (ACE) inhibitors therapy status

Identifying and Definitional attributes

Knowledgebase ID: ***001020*** ***Version number:*** ***1***

Metadata type: Data element

Definition:	Identifies the person's ACE inhibitor therapy status.
Context:	Health care and clinical settings.

Relational and representational attributes

Data type: Numeric ***Maximum field size:*** 2

Representational class: Code ***Format:*** NN

Data domain:

10	Given
21	Not given — patient refusal
22	Not given — allergy or intolerance (e.g. cough) to ACE inhibitors
23	Not given — moderate to severe aortic stenosis
24	Not given — bilateral renal artery stenosis
25	Not given — history of angio-oedema, hives, or rash in response to ACE inhibitors
26	Not given — hyperkalaemia
27	Not given — symptomatic hypotension
28	Not given — severe renal dysfunction
29	Not given — other
90	Not stated/inadequately described

Guide for use: If recording 'Not given', record the principal reason if more than one code applies.

Verification rules:

Collection methods: For Acute coronary syndrome (ACS) reporting, can be collected at any time point during the management of the current event (i.e. at the time of triage, at times during the admission, or at the time of discharge).

Related metadata:

Information model link: NHIM Physical wellbeing

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 04/06/2004

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Registration authority: National Health Information Group.

Steward: National Heart Foundation of Australia.
Cardiac Society of Australian and New Zealand.

Comments:

Aspirin therapy status

Identifying and Definitional attributes

Knowledgebase ID: ***001022*** ***Version number:*** ***1***

Metadata type: Data element

Definition:	Identifies the person's aspirin therapy status.
Context:	Health care and clinical settings.

Relational and representational attributes

Data type: Numeric ***Maximum field size:*** 2

Representational class: Code ***Format:*** NN

Data domain:	10	Given
	21	Not given — patient refusal
	22	Not given — true allergy to aspirin
	23	Not given — active bleeding
	24	Not given — bleeding risk
	29	Not given — other
	90	Not stated/inadequately described

Guide for use: If recording 'Not given', record the principal reason if more than one code applies.

Verification rules:

Collection methods: For Acute coronary syndrome (ACS) reporting, can be collected at any time point during the management of the current event (i.e. at the time of triage, at times during the admission, or at the time of discharge).

Related metadata:

Information model link: NHIM Physical wellbeing

Data Set Specifications:		***Start date***	***End date***
DSS —	Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 04/06/2004

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Registration authority: National Health Information Group.

Steward: The National Heart Foundation of Australia.
The Cardiac Society of Australia and New Zealand.

Comments:

Beta-blocker therapy status

Identifying and Definitional attributes

Knowledgebase ID: ***001023*** ***Version number:*** ***1***

Metadata type: Data element

Definition:	Identifies the person's beta-blocker therapy status.
Context:	Health care and clinical settings.

Relational and representational attributes

Data type: Numeric ***Maximum field size:*** 2

Representational class: Code ***Format:*** NN

Data domain:	10	Given
	21	Not given – Patient refusal
	22	Not given — Allergy or history of intolerance
	23	Not given — Bradycardia (heart rate less than 50 beats per minute)
	24	Not given — Symptomatic acute heart failure
	25	Not given — Systolic blood pressure of less than 90 mmHg
	26	Not given — PR interval greater than 0.24 seconds
	27	Not given — 2nd- and 3rd-degree heart block or bifascicular heart block
	28	Not given – Asthma/Airways hyper-reactivity
	29	Not given — other
	90	Not stated/inadequately described

Guide for use: If recording 'Not given', record the principal reason if more than one code applies.

Verification rules:

Collection methods: For Acute coronary syndrome (ACS) reporting, can be collected at any time point during the management of the current event (i.e. at the time of triage, at times during the admission, or at the time of discharge).

Related metadata:

Information model link: NHIM Physical wellbeing

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 04/06/2004

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Registration authority: National Health Information Group.

Steward: The National Heart Foundation of Australia.
The Cardiac Society of Australia and New Zealand.

Comments:

Bleeding episode using TIMI criteria — status

Identifying and Definitional attributes

Knowledgebase ID: ***001024*** ***Version number:*** ***1***

Metadata type: Data element

Definition:	A person's episode of bleeding as described by the Thrombolysis In Myocardial Infarction (TIMI) criteria.
Context:	Health care and clinical settings.

Relational and representational attributes

Data type: Numeric ***Maximum field size:*** 1

Representational class: Code ***Format:*** N

Data domain:	1	Major
	2	Minor
	3	Non TIMI bleeding
	4	None
	9	Not stated/inadequately described

Guide for use:

Code 1 Major. Overt clinical bleeding (or documented intracranial or retroperitoneal haemorrhage) associated with a drop in haemoglobin of greater than 5g/dl (0.5g/l) or a haematocrit of greater than 15% (absolute).

Code 2 Minor. Overt clinical bleeding associated with a fall in haemoglobin of3 or less than or equal to 5g/dl (0.5g/l) or a haematocrit of 9% to less than or equal to 15% (absolute).

Code 3 Non TIMI bleeding. Bleeding event that does not meet the major or minor definition

Code 4 None. No bleeding event

Note in calculating the fall in haemoglobin or haematocrit, transfusion of whole blood or packed red blood cells is counted as 1g/dl (0.1g/l) haemoglobin or 3% absolute haematocrit.

Acute coronary syndrome DSS:

Can be collected at any time point during the management of the current event (i.e. at the time of triage, at times during the admission, or at the time of discharge).

Verification rules:

Collection methods:

Related metadata: Is used in conjunction with Acute coronary syndrome procedure type, version 1.

Information model link: NHIM Physical wellbeing

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status:	CURRENT	***Effective Date:***	04/06/2004
Source organisation:	Acute Coronary Syndrome Data Working Group.		
Source document:	Rao AK, Pratt C, Berke A, et al. *Thrombolysis in Myocardial Infarction (TIMI) Trial, phase I: hemorrhagic manifestations and changes in plasma fibrinogen and the fibrinolytic system in patients with recombinant tissue plasminogen activator and streptokinase*. J Am Coll Cardiol 1988; 11:1–11.		
Registration authority:	National Health Information Group.		
Steward:	The National Heart Foundation of Australia. The Cardiac Society of Australia and New Zealand.		
Comments:			

Blood pressure — diastolic measured

Identifying and Definitional Attributes

Knowledgebase ID: ***000649*** ***Version number:*** ***1***

Metadata type: Data Element

Definition:	The person's measured diastolic blood pressure.
Context:	Public health, health care and clinical settings: High blood pressure is a major risk factor for coronary heart disease, heart failure, stroke, and renal failure with the risk increasing along with the level of blood pressure.

Relational and Representational Attributes

Data type: Numeric ***Maximum field size:*** 3

Representational class: Quantitative value ***Format:*** NNN

Data domain:	Measured pressure head in millimetres of mercury (mm Hg) 999 Not collected

Guide for use: The diastolic pressure is recorded as phase V Korotkoff (disappearance of sound) however phase IV Korotkoff (muffling of sound) is used if the sound continues towards zero but does not cease.

If Blood pressure – diastolic is not collected or not able to be collected, code 999.

Verification rules:

Collection methods: Measurement protocol for resting blood pressure:

The diastolic blood pressure is one component of a routine blood pressure measurement (i.e. systolic/diastolic) and reflects the minimum pressure to which the arteries are exposed.

- The patient should be relaxed and seated, preferably for several minutes, (at least 5 minutes). Ideally, patients should not take caffeine-containing beverages or smoke for two hours before blood pressure is measured.
- Ideally, patients should not exercise within half an hour of the measurement being taken (National Nutrition Survey User's Guide).
- Use a mercury sphygmomanometer. All other sphygmomanometers should be calibrated regularly against mercury sphygmomanometers to ensure accuracy.
- Bladder length should be at least 80%, and width at least 40% of the circumference of the mid-upper arm. If the velcro on the cuff is not totally attached, the cuff is probably too small.
- Wrap cuff snugly around upper arm, with the centre of the bladder of the cuff positioned over the brachial artery and the lower border of the cuff about 2 cm above the bend of the elbow.
- Ensure cuff is at heart level, whatever the position of the patient.
- Palpate the radial pulse of the arm in which the blood pressure is being measured.

- Inflate cuff to the pressure at which the radial pulse disappears and note this value. Deflate cuff, wait 30 seconds, and then inflate cuff to 30 mm Hg above the pressure at which the radial pulse disappeared.
- Deflate the cuff at a rate of 2–3 mm Hg/beat (2–3 mm Hg/sec) or less.
- Recording the diastolic pressure use phase V Korotkoff (disappearance of sound). Use phase IV Korotkoff (muffling of sound) only if sound continues towards zero but does not cease. Wait 30 seconds before repeating the procedure in the same arm. Average the readings.
- If the first two readings differ by more than 4 mmHg diastolic or if initial readings are high, take several readings after five minutes of quiet rest.

Related metadata: Is used in conjunction with Blood pressure – systolic measured, version 1.

Is used in conjunction with Service contact date, version 1.

Information model link: NHIM Service provision event

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	
DSS –	Cardiovascular disease (clinical)	01/01/2003	
DSS –	Diabetes (clinical)	01/01/2003	

Administrative Attributes

Admin status: CURRENT ***Effective Date:*** 01/01/2003

Source organisation: CV-Data Working Group

National Diabetes Data Working Group

Source document: The National Heart Foundation Blood Pressure Advisory Committee's 'Guidelines for the Management of Hypertension – 1999' which are largely based on World Health Organization Recommendations. (Guidelines Subcommittee of the WHO-SH: 1999 WHO-ISH guidelines for management of hypertension. J Hypertension 1999; 17:151–83).

Australian Bureau of Statistics 1998. National Nutrition Survey User's Guide 1995. Cat. No. 4801.0. Canberra: ABS. (p. 20).

National Diabetes Outcomes Quality Review Initiative (NDOQRIN) data dictionary.

Registration authority: National Health Information Group.

Steward:

Comments: The pressure head is the height difference a pressure can raise a fluid's equilibrium level above the surface subjected to pressure. (Blood pressure is usually measured as a head of Mercury, and this is the unit of measure nominated for this data element.)

The current (2002) definition of hypertension is based on the level of blood pressure above which treatment is recommended, and this depends on the presence of other risk factors, e.g. age, diabetes etc. (NHF 1999 Guide to Management of Hypertension).

DSS – Cardiovascular disease (clinical):

In the primary care setting, blood pressure on both arms should be measured at the first visit, particularly if there is evidence of peripheral vascular disease.

Variation of up to 5 mm Hg in blood pressure between arms can be acceptable. In certain conditions (e.g. chronic aortic dissection, subclavian artery stenosis) all blood pressure recordings should be taken from the arm with the highest reading.

Measure sitting and standing blood pressures in elderly and diabetic patients or in other situations in which orthostatic hypotension might be suspected.

Measure and record heart rate and rhythm. Note: Atrial fibrillation in a patient with hypertension indicates increased risk of stroke.

In all patients, consideration should be given to obtaining blood pressure measurements outside the clinic setting either by self-measurement of blood pressure at home or by non-invasive ambulatory blood pressure monitoring.

Target-organ damage and cardiovascular outcome relate more closely to blood pressures measured outside the clinic, particularly with ambulatory monitoring. An accurate, reliable machine and technique are essential if home blood pressure monitoring is to be used. In up to 30% of patients who are hypertensive in the clinic, blood pressure outside the clinic is within acceptable limits ('white coat' hypertension).

High blood pressure is a major risk factor for coronary heart disease, heart failure, stroke, and renal failure with the risk increasing along with the level of blood pressure (Ashwell 1997; DHSH 1994b; Whelton 1994; Kannel 1991). The higher the blood pressure, the higher the risk of both stroke and coronary heart disease. The dividing line between normotension and hypertension is arbitrary.

Both systolic and diastolic blood pressures are predictors of heart, stroke and vascular disease at all ages (Kannel 1991), although diastolic blood pressure is a weaker predictor of death due to coronary heart disease (Neaton & Wentworth 1992).

The risk of disease increases as the level of blood pressure increases. When blood pressure is lowered by 4–6 mmHg over two to three years, it is estimated that the risk reduces by 14% in patients with coronary heart disease and by 42% in stroke patients (Collins et al. 1990; Rose 1992.) When high blood pressure is controlled by medication, the risk of cardiovascular disease is reduced, but not to the levels of unaffected people.

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

DSS – Diabetes (clinical):

The United Kingdom Prospective Diabetes Study (1987 to 1998) showed major benefit from lowering blood pressure in preventing diabetes complications.

A target for blood pressure for people who suffer from diabetes is 130/85 mm Hg or less; recommended by the Australian Diabetes Society (if proteinuria is detected it is less than 125/75 mm Hg) Australian Medicines Handbook: last modified February, 2001).

Following the NSW Principles of Care and Guidelines for the Clinical Management of Diabetes Mellitus for patients who suffer from hypertension, if pharmacological intervention is required, ACE inhibitors are the preferred agents for treating hypertension in people with diabetes (unless contraindicated).

References:

'Guidelines for the Management of Hypertension – 1999' largely based on World Health Organization Recommendations. (Guidelines Subcommittee of the WHO) J Hypertension 1999; 17: 151–83.).

Diabetes Control and Complications Trial: DCCT New England Journal of Medicine, 329(14), September 30, 1993.

UKPDS 38 Tight blood pressure control and risk of macrovascular and microvascular complications in type 2 diabetes: UK Prospective Diabetes Study Group. British Medical Journal (1998); 317: 703–713.

Blood pressure — systolic measured

Identifying and Definitional Attributes

Knowledgebase ID: ***000650*** ***Version number:*** ***1***

Metadata type: Data element

Definition:	The person's measured systolic blood pressure.
Context:	Public health, health care and clinical settings: High blood pressure is a major risk factor for coronary heart disease, heart failure, stroke, and renal failure with the risk increasing along with the level of blood pressure

Relational and Representational Attributes

Data type: Numeric ***Maximum field size:*** 3

Representational class: Quantitative value ***Format:*** NNN

Data domain:	Measured pressure head in millimetres of mercury (mm Hg) 999 Not collected

Guide for use: For recording the systolic reading, use phase I Korotkoff (the first appearance of sound).

If Blood pressure – systolic is not collected or not able to be collected, code 999.

Verification rules:

Collection methods: Measurement protocol for resting blood pressure:

The systolic blood pressure is one component of a routine blood pressure measurement (i.e. systolic/diastolic) and reflects the maximum pressure to which the arteries are exposed.

- The patient should be relaxed and seated, preferably for several minutes, (at least 5 minutes). Ideally, patients should not take caffeine-containing beverages or smoke for two hours before blood pressure is measured.
- Ideally, patients should not exercise within half an hour of the measurement being taken (National Nutrition Survey User's Guide).
- Use a mercury sphygmomanometer. All other sphygmomanometers should be calibrated regularly against mercury sphygmomanometers to ensure accuracy.-Bladder length should be at least 80%, and width at least 40% of the circumference of the mid-upper arm. If the Velcro on the cuff is not totally attached, the cuff is probably too small.
- Wrap cuff snugly around upper arm, with the centre of the bladder of the cuff positioned over the brachial artery and the lower border of the cuff about 2 cm above the bend of the elbow.
- Ensure cuff is at heart level, whatever the position of the patient.
- Palpate the radial pulse of the arm in which the blood pressure is being measured.
- Inflate cuff to the pressure at which the radial pulse disappears and note this value. Deflate cuff, wait 30 seconds, and then inflate cuff to 30 mm Hg above the pressure at which the radial pulse disappeared.
- Deflate the cuff at a rate of 2–3 mm Hg/beat (2–3 mm Hg/sec) or less.

- For recording the systolic reading, use phase I Korotkoff (the first appearance of sound). Wait 30 seconds before repeating the procedure in the same arm. Average the readings. If the first two readings differ by more than 6 mm Hg systolic or if initial readings are high, take several readings after five minutes of quiet rest.

Related metadata: Is used in conjunction with Blood pressure – diastolic measured, version 1.

Is used in conjunction with Service contact date, version 1.

Information model link: NHIM Service provision event

Data Set Specifications:	***Start date***	***End date***
DSS – Acute coronary syndrome (clinical)	04/06/2004	
DSS – Cardiovascular disease (clinical)	01/01/2003	
DSS – Diabetes (clinical)	01/01/2003	

Administrative Attributes

Admin status: CURRENT ***Effective Date:*** 01/01/2003

Source organisation: CV-Data Working Group

National Diabetes Data Working Group

Source document: The National Heart Foundation Blood Pressure Advisory Committee's 'Guidelines for the Management of Hypertension – 1999' which are largely based on World Health Organization Recommendations. (Guidelines Subcommittee of the WHO-ISH: 1999 WHO-ISH guidelines for management of hypertension. J Hypertension 1999; 17:151–83).

Australian Bureau of Statistics 1998. National Nutrition Survey User's Guide 1995. Cat. No. 4801.0. Canberra: ABS. (p. 20).

National Diabetes Outcomes Quality Review Initiative (NDOQRIN) data dictionary.

Registration authority: National Health Information Group.

Steward:

Comments: The pressure head is the height difference a pressure can raise a fluid's equilibrium level above the surface subjected to pressure. (Blood pressure is usually measured as a head of Mercury, and this is the unit of measure nominated for this data element.)The current (2002) definition of hypertension is based on the level of blood pressure above which treatment is recommended, and this depends on the presence of other risk factors, e.g. age, diabetes etc.(NHF 1999 Guide to Management of Hypertension).

DSS – Cardiovascular disease (clinical):

In the primary care setting, blood pressure on both arms should be measured at the first visit, particularly if there is evidence of peripheral vascular disease.

Variation of up to 5 mm Hg in blood pressure between arms can be acceptable. In certain conditions (e.g. chronic aortic dissection, subclavian artery stenosis) all blood pressure recordings should be taken from the arm with the highest reading.

Measure sitting and standing blood pressures in elderly and diabetic patients or in other situations in which orthostatic hypotension might be suspected.

Measure and record heart rate and rhythm. Note: Atrial fibrillation in a patient with hypertension indicates increased risk of stroke.

In all patients, consideration should be given to obtaining blood pressure measurements outside the clinic setting either by self-measurement of blood pressure at home or by non-invasive ambulatory blood pressure monitoring.

Target-organ damage and cardiovascular outcome relate more closely to blood pressures measured outside the clinic, particularly with ambulatory monitoring. An accurate, reliable machine and technique are essential if home blood pressure monitoring is to be used. In up to 30% of patients who are hypertensive in the clinic, blood pressure outside the clinic is within acceptable limits ('white coat' hypertension).

High blood pressure is a major risk factor for coronary heart disease, heart failure, stroke, and renal failure with the risk increasing along with the level of blood pressure (Ashwell 1997; DHSH 1994b; Whelton 1994; Kannel 1991). The higher the blood pressure, the higher the risk of both stroke and coronary heart disease. The dividing line between normotension and hypertension is arbitrary.

Both systolic and diastolic blood pressures are predictors of heart, stroke and vascular disease at all ages (Kannel 1991), although diastolic blood pressure is a weaker predictor of death due to coronary heart disease (Neaton & Wentworth 1992).

The risk of disease increases as the level of blood pressure increases. When blood pressure is lowered by 4–6 mm Hg over two to three years, it is estimated that the risk reduces by 14 per cent in patients with coronary heart disease and by 42 per cent in stroke patients (Collins et al. 1990; Rose 1992.) When high blood pressure is controlled by medication, the risk of cardiovascular disease is reduced, but not to the levels of unaffected people.

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

DSS – Diabetes (clinical):

The United Kingdom Prospective Diabetes Study (1987 to 1998) showed major benefit from lowering blood pressure in preventing diabetes complications.

A target for blood pressure for people who suffer from diabetes is 130/85 mm Hg or less; recommended by the Australian Diabetes Society (if proteinuria is detected it is less than 125/75 mm Hg) Australian Medicines Handbook: last modified February, 2001).

Following the NSW Principles of Care and Guidelines for the Clinical Management of Diabetes Mellitus for patients who suffer from hypertension, if pharmacological intervention is required, ACE inhibitors are the preferred agents for treating hypertension in people with diabetes (unless contraindicated).

References:

'Guidelines for the Management of Hypertension – 1999' largely based on World Health Organization Recommendations. (Guidelines Subcommittee of the WHO) J Hypertension 1999; 17: 151–83.).

Diabetes Control and Complications Trial: DCCT New England Journal of Medicine, 329(14), September 30, 1993.

UKPDS 38 Tight blood pressure control and risk of macrovascular and microvascular complications in type 2 diabetes: UK Prospective Diabetes Study Group. British Medical Journal (1998); 317: 703–713.

Chest pain pattern category

Identifying and Definitional attributes

Knowledgebase ID: ***001025*** ***Version number:*** ***1***

Metadata type: Date element

Definition:	Describes the person's chest pain pattern.
Context:	Health care and clinical settings.

Relational and representational attributes

Data type: Numeric ***Maximum field size:*** 1

Representational class: Code ***Format:*** N

Data domain:

1	Atypical chest pain
2	Stable chest pain pattern
3	Unstable chest pain pattern: rest &/or prolonged
4	Unstable chest pain pattern: new & severe
5	Unstable chest pain pattern: accelerated & severe
8	No chest pain/discomfort
9	Not stated/inadequately described

Guide for use: For Acute coronary syndrome (ACS) reporting, identifies the chest pain pattern described on presentation.

Code 1 Atypical chest pain. Pain, pressure, or discomfort in the chest, neck, or arms not clearly exertional or not otherwise consistent with pain or discomfort of myocardial ischaemic origin

Code 2 Stable chest pain pattern. Chest pain without a change in frequency or pattern for the 6 weeks before this presentation or procedure. Chest pain is controlled by rest and/or sublingual/oral/transcutaneous medications.

Code 3 Unstable chest pain pattern: rest &/or prolonged. Chest pain that occurred at rest and was prolonged, usually lasting more than 10 minutes

Code 4 Unstable chest pain pattern: new & severe. New-onset chest pain that could be described as at least Canadian Cardiovascular Society (CCS) classification III severity

Code 5 Unstable chest pain pattern: accelerated & severe. Recent acceleration of chest pain pattern that could be described by an increase in severity of at least 1 CCS class to at least CCS class III

Code 8 No chest pain/discomfort

Code 9 Not stated/ inadequately described

Chest pain or discomfort of myocardial ischaemic origin is usually described as chest pain, discomfort or pressure, jaw pain, arm pain or other equivalent discomfort suggestive of cardiac ischaemia. Ask the person when the symptoms first occurred or obtain this information from appropriate documentation.

Verification rules:

Collection methods:

Related metadata: Is used in conjunction with Time patient presents, version 2.
Is used in conjunction with Date patient presents, version 2.
Is a qualifier of Acute coronary syndrome stratum, version 1.

Information model link: NHIM Physical wellbeing

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 04/06/2004

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Registration authority: National Health Information Group.

Steward: The National Heart Foundation of Australia.
The Cardiac Society of Australia and New Zealand.

Comments: The Canadian Cardiovascular Society classes of angina can be used to support categorisation of chest pain patterns. Canadian Cardiovascular Society (CCS) classes of angina (Campeau L. *Grading of angina pectoris*. Circulation 1976; 54:522.)

1. Ordinary physical activity (for example, walking or climbing stairs) does not cause angina; angina occurs with strenuous or rapid or prolonged exertion at work or recreation

2. Slight limitation of ordinary activity (for example, angina occurs walking or stair climbing after meals, in cold, in wind, under emotional stress, or only during the few hours after awakening; walking more than 2 blocks on the level or climbing more than 1 flight of ordinary stairs at a normal pace; and in normal conditions)

3. Marked limitation of ordinary activity (for example, angina occurs with walking 1 or 2 blocks on the level or climbing 1 flight of stairs in normal conditions and at a normal pace)

4. Inability to perform any physical activity without discomfort; angina syndrome may be present at rest.

Cholesterol-HDL — measured

Identifying and Definitional Attributes

Knowledgebase ID: ***000651*** ***Version number:*** ***1***

Metadata type: Data element

Definition:	A person's measured high-density lipoprotein cholesterol (HDL-C).
Context:	Public health, health care and clinical settings: The evidence is strong that HDL-C has a direct protective effect against the development of arteriosclerosis.

Relational and Representational Attributes

Data type: Numeric ***Maximum field size:*** 3

Representational class: Quantitative value ***Format:*** N.NN

Data domain:	Measurement in mmol/L to 2 decimal places 9.99 Not measured/inadequately described

Guide for use:

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

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 date of assessment should be recorded.

DSS – Diabetes (clinical):

When reporting, record absolute result of the most recent HDL Cholesterol measurement in the last 12 months to the nearest 0.01 mmol/L.

Verification rules:

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 the calculation of Cholesterol-LDL calculated, version 1.

Relates to the data element Cholesterol-total – measured, version 1.

Relates to the data element Dyslipidaemia – treatment, version 1.

Is used in conjunction with Fasting status, version 1.

Is used in conjunction with Service contact date, version 1.

Relates to the data element Triglycerides – measured, version 1.

Information model link: NHIM Service provision event

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	

DSS –	Cardiovascular disease (clinical)	01/01/2003
DSS –	Diabetes (clinical)	01/01/2003

Administrative Attributes

Admin. status: CURRENT ***Effective date:*** 01/01/2003

Source organisation: CV-Data Working Group

National Diabetes Data Working Group

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.

Source document:

Registration authority: National Health Information Group.

Steward:

Comments: DSS – Cardiovascular disease (clinical):

High-density lipoprotein cholesterol (HDL-C) is easily measured and has been shown to be a negative predictor of future coronary events.

An inverse relationship between the level of HDL-C and the risk of developing premature coronary heart disease (CHD) has been a consistent finding in a large number of prospective population studies. In many of these studies, the level of HDL-C has been the single most powerful predictor of future coronary events. Key studies of the relationship between HDLs and CHD include the Framingham Heart Study (Castelli et al. 1986), the PROCAM Study (Assman et al. 1998), the Helsinki Heart Study (Manninen et al. 1992) and the MRFIT study (Stamler et al. 1986; Neaton et al. 1992).

There are several well-documented functions of HDLs that may explain the ability of these lipoproteins to protect against arteriosclerosis (Barter and Rye 1996). The best recognised of these is the cholesterol efflux from cells promoted by HDLs in a process that may minimise the accumulation of foam cells in the artery wall. The major proteins of HDLs and also other proteins (e.g. paraoxonase) that co-transport with HDLs in plasma have anti-oxidant properties. Thus, HDLs have the ability to inhibit the oxidative modification of LDLs and may therefore reduce the atherogenicity of these lipoproteins.

Overall, it has been concluded from the prospective population studies that for every 0.025 mmol/L increase in HDL-C, the coronary risk is reduced by 2–5%. For a review of the relationship between HDL-C and CHD, see Barter and Rye (1996). A level below 1.0 mmol/L increases risk approximately 2-fold (Gordon et al. 1989; Assmann et al. 1998). (Lipid Management Guidelines – 2001, MJA 2001; 175: S57–S88.

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

DSS – Diabetes (clinical):

Lowered HDL-C, with increased serum triglyceride and increased low-density lipoprotein cholesterol are important risk factors for vascular disease in type 2 diabetes.

In the NSW Principles of Care and Guidelines for the Clinical Management of Diabetes Mellitus, recommendations are that HDL, total cholesterol, triglycerides are to be measured:

- every 1–2 years (if normal)
- every 3–6 months (if abnormal or on treatment)

and the target is:

- to increase HDL Cholesterol to more than or equal to 1.0 mmol/L
- to reduce total Cholesterol to less than 5.5 mmol/L
- to reduce triglyceride levels to less than 2.0 mmol/L.

If pre-existing cardiovascular disease (bypass surgery or myocardial infarction) total cholesterol should be less than 4.5 mmol/L. A level below 1.0 mmol/L increases risk approximately 2-fold (Gordon et al. 1989; Assmann et al. 1998), (Draft NHF Lipid Guidelines Paper 2001). It has been concluded from prospective population studies that for every 0.025 mmol/L increase in HDL-C, the coronary risk is reduced by 2–5%.

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

References:

National Heart Foundation of Australia – Lipid Management Guidelines 2001.

Cholesterol-LDL — calculated

Identifying and Definitional Attributes

Knowledgebase ID:	***000652***	***Version number:***	***1***
Metadata type:	Derived data element		

Definition:	A person's calculated low-density lipoprotein cholesterol (LDL-C).
Context:	Public health, health care and clinical setting.

Relational and Representational Attributes

Data type:	Numeric	***Maximum field size:***	3
Representational class:	Quantitative value	***Format:***	NN.N

Data domain:	Calculated value recorded in mmol/L to one decimal place

Guide for use:

Formula:

LDL-C = (plasma total cholesterol) - (high-density lipoprotein cholesterol) - (fasting plasma triglyceride divided by 2.2).

Verification rules:

Collection methods:

The LDL-C is usually calculated from the Friedwald Equation (Friedwald et al. 1972), which depends on knowing the blood levels of the total cholesterol and high-density lipoprotein cholesterol and the fasting level of the triglyceride.

Note that the Friedwald equation becomes unreliable when the plasma triglyceride exceeds 4.5 mmol/L.

Note also that while cholesterol levels are reliable for the first 24 hours after the onset of acute coronary syndromes, they may be unreliable for the subsequent 6 weeks after an event.

- 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.

Related metadata:

Is calculated using Cholesterol-HDL – measured, version 1.

Is calculated using Cholesterol-total – measured, version 1.

Is calculated using Fasting status, version 1.

Is used in conjunction with Service contact date, version 1.

Is calculated using Triglycerides – measured, version 1.

Information model link: NHIM Service provision event

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	
DSS –	Cardiovascular disease (clinical)	01/01/2003	

Administrative Attributes

Admin. status: CURRENT ***Effective Date:*** 01/01/2003

Source organisation: CV-Data Working Group

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.

Registration authority: National Health Information Group.

Steward: The National Heart Foundation of Australia.

The Cardiac Society of Australia and New Zealand.

Comments: High blood cholesterol is a key factor in heart, stroke and vascular disease, especially coronary heart disease (CHD).

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.

The majority of the cholesterol in plasma is transported as a component of LDL-C. Thus, the evidence linking CHD to plasma total cholesterol and LDL-C is essentially the same.

DSS – Cardiovascular disease (clinical):

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

Scientific studies have shown a continuous relationship between lipid levels and CHD and overwhelming evidence that lipid lowering interventions reduces CHD progression, morbidity and mortality.

There are many large-scale, prospective population studies defining the relationship between plasma total (and LDL) cholesterol and the future risk of developing CHD. The results of prospective population studies are consistent and support several general conclusions:

- the majority of people with CHD do not have markedly elevated levels of plasma total cholesterol or LDL-C
- there is a continuous positive but curvilinear relationship between the concentration of plasma total (and LDL) cholesterol and the risk of having a coronary event and of dying from CHD
- there is no evidence that a low level of plasma (or LDL) cholesterol predisposes to an increase in non-coronary mortality.

The excess non-coronary mortality at low cholesterol levels in the Honolulu Heart Study (Yano et al. 1983; Stemmermann et al. 1991) was apparent only in people who smoked and is consistent with a view that smokers may have occult smoking-related disease that is responsible for both an increased mortality and a low plasma cholesterol.

It should be emphasised that the prospective studies demonstrate an association between plasma total cholesterol and LDL-C and the risk of developing CHD. (Lipid Management Guidelines – 2001, MJA 2001; 175: S57–S88 and Commonwealth Department of Health & Ageing and Australian Institute of Health and Welfare (1999) National Health Priority Areas Report: Cardiovascular Health 1998. AIHW Cat. No. PHE 9. HEALTH and AIHW, Canberra 14–17).

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

Cholesterol-total — measured

Identifying and Definitional Attributes

Knowledgebase ID:	***000653***	***Version number:***	***1***
Metadata type:	Data element		

Definition:	A person's measured total cholesterol (TC).
Context:	Public health, health care and clinical settings.

Relational and Representational Attributes

Data type:	Numeric	***Maximum field size:***	4
Representational class:	Quantitative value	***Format:***	NN.N

Data domain:	Measurement in mmol/L to one decimal place Not stated/Inadequately described

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.

Verification rules:

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: 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 Dyslipidaemia – treatment, version 1

Is used in conjunction with Fasting status, version 1

Is used in conjunction with Service contact date, version 1

Relates to the data element Triglycerides – measured, version 1

Information model link: NHIM Service provision event

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	
DSS –	Cardiovascular disease (clinical)	01/01/2003	
DSS –	Diabetes (clinical)	01/01/2003	

Administrative Attributes

Admin. status: CURRENT ***Effective Date:*** 01/01/2003

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

Registration authority: National Health Information Group.

Steward:

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.
- 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 HDL-C 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).

Clinical evidence status

Identifying and Definitional attributes

Knowledgebase ID: ***001026*** ***Version number:*** ***1***

Metadata type: Data element

Definition:	Indicator of the status of evidence for a pre-existing clinical condition.
Context:	Acute coronary treatment settings.

Relational and representational attributes

Data type: Numeric ***Maximum field size:*** 1

Representational class: Code ***Format:*** N

Data domain:	1	objective evidence
	2	no objective evidence

Guide for use:

Acute coronary syndrome — DSS specific:

This data element seeks to ensure that patients with self-reported past symptoms pertinent to acute coronary syndrome, have objective evidence supporting reported diagnoses, using current medical practice.

For Chronic lung disease

Objective evidence is coded where the diagnosis is supported by current use of chronic lung disease pharmacological therapy, or a forced expiratory volume in 1 second (FEV1) less than 80% predicted FEV1/FVC less than 0.7 (post bronchodilator). Respiratory failure PaO2 less than 60 mmHg (8kPa), or PaCO2 greater than 50 mmHg (6.7 kPa).

For Heart failure

Objective evidence is coded where a patient has current symptoms of heart failure (typically breathlessness or fatigue), either at rest or during exercise and/or signs of pulmonary or peripheral congestion and objective evidence of cardiac dysfunction at rest. The diagnosis is derived from and substantiated by clinical documentation from testing according to current practices.

For Stroke

For ischaemic: non-haemorrhagic cerebral infarction, objective evidence is coded where the diagnosis is supported by cerebral imaging (CT or MRI), or
For haemorrhagic: intracerebral haemorrhage, objective evidence is coded where the diagnosis is supported by cerebral imaging (CT or MRI).

For Peripheral arterial disease

For Peripheral artery disease, objective evidence is coded where the diagnosis is derived from and substantiated by clinical documentation for a patient with a history of either chronic or acute occlusion or narrowing of the arterial lumen in the aorta or extremities.

For Aortic aneurysm, objective evidence is coded when the diagnosis of aneurysmal dilatation of the aorta (thoracic and or abdominal) is

supported and substantiated by appropriate documentation of objective testing.

For Renal artery stenosis, objective evidence is coded when the diagnosis of functional stenosis of one or both renal arteries is present and is supported and substantiated by appropriate documentation of objective testing.

Sleep Apnoea syndrome

Objective evidence is coded where the diagnosis is derived from and substantiated by clinical documentation of sleep apnoea syndrome (SAS). SAS has been diagnosed from the results of a sleep study.

Verification rules:

Collection methods: For each concurrent clinical condition — on presentation, the data element Clinical evidence status must also be recorded.

Related metadata: Is used in conjunction with the data element Concurrent clinical condition – on presentation, version 1.

Information model link: NHIM Acute event

Information framework link:

Data Set Specifications:	***Start date***	***End date***
DSS – Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 04/06/2004

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Registration authority: National Health Information Group.

Steward: The National Heart Foundation of Australia.

The Cardiac Society of Australia and New Zealand.

Comments:

Chronic lung disease

- current use of chronic lung disease pharmacological therapy (e.g. inhalers, theophylline, aminophylline, or steroids) and/or
- Note: the diagnosis rests on the airflow limitation which is not fully reversible. Consider treating as asthma if airflow limitation is substantially reversible. (The Thoracic Society of Australia & New Zealand and the Australian Lung Foundation, *Chronic Obstructive Pulmonary Disease (COPD) Australian & New Zealand Management Guidelines and the COPD Handbook*. Version 1, November 2002.)

Heart failure

The most widely available investigation for documenting left ventricular dysfunction is the transthoracic echocardiogram (TTE).

Other modalities include:

- transoesophageal echocardiography (TOE)
- radionuclide ventriculography (RVG)
- left ventriculogram (LVgram)

- magnetic resonance imaging (MRI)

In the absence of any adjunctive laboratory tests, evidence of supportive clinical signs of ventricular dysfunction. These include:

- third heart sound (S3)
- cardiomegaly
- elevated jugular venous pressure (JVP)
- chest X-ray evidence of pulmonary congestion

Clinical procedure timing status

Identifying and Definitional attributes

Knowledgebase ID: ***001027*** ***Version number:*** ***1***

Metadata type: Data element

Definition:	An indicator of the timing of the provision of a clinical procedure.
Context:	Acute coronary treatment settings.

Relational and representational attributes

Data type: Numeric ***Maximum field size:*** 1

Representational class: Code ***Format:*** N

Data domain:	1	procedure performed prior to an episode of admitted patient care
	2	procedure performed during an episode of admitted patient care

Guide for use: Record only for those procedure codes that apply.

Verification rules:

Collection methods: This data element should be recorded for each type of procedure performed that is pertinent to the treatment of acute coronary syndrome.

Related metadata: Is used in conjunction with Acute coronary syndrome procedure type, version 1.

Is used in conjunction with Acute coronary syndrome stratum, version 1.

Information model link: NHIM Acute event

Information framework link:

Data Set Specifications:	***Start date***	***End date***
DSS – Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 04/06/2004

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Registration authority: National Health Information Group

Steward: The National Heart Foundation of Australia.
The Cardiac Society of Australia and New Zealand.

Comments:

Clopidogrel therapy status

Identifying and Definitional attributes

Knowledgebase ID:	***001028***	***Version number:***	***1***
Metadata type:	Data element		

Definition:	Identifies the person's clopidogrel therapy status.
Context:	Health care and clinical settings.

Relational and representational attributes

Data type:	Numeric	***Maximum field size:***	2
Representational class:	Code	***Format:***	NN

Data domain:	10	Given
	21	Not given – therapy not indicated
	22	Not given – patient refusal
	23	Not given – true allergy to clopidogrel
	24	Not given – active bleeding
	25	Not given – bleeding risk
	26	Not given – thrombocytopenia
	27	Not given – severe hepatic dysfunction
	29	Not given – other
	90	Not stated/inadequately described

Guide for use: If recording 'Not given', record the principal reason if more than one code applies.

Collection methods: For Acute coronary syndrome (ACS) reporting, can be collected at any time point during the management of the current event (i.e. at the time of triage, at times during the admission, or at the time of discharge).

Related metadata:

Information model link: NHIM Physical wellbeing

Information framework link:

Data Set Specifications:	***Start date***	***End date***
DSS – Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status:	CURRENT	***Effective Date:***	04/06/2004

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Registration authority: National Health Information Group.

Steward: The National Heart Foundation of Australia.
The Cardiac Society of Australia and New Zealand.

Comments:

Concurrent clinical condition — on presentation

Identifying and Definitional attributes

Knowledgebase ID: ***001029*** ***Version number:*** ***1***

Metadata type: Data element

Definition:	The concurrent medical conditions, which are pertinent to the risk stratification and treatment of acute coronary syndrome that a person has or has undergone prior to presentation.
Context:	Acute coronary syndrome clinical reporting only.

Relational and representational attributes

Data type: Numeric ***Maximum field size:*** 2

Representational class: Code ***Format:*** NN

Data domain:

Angina

11 Angina for more than last two weeks

12 Angina only in the last two weeks

Chronic lung disease

21 Chronic lung disease

Heart failure

31 Heart failure

Hypertension

41 Hypertension

Stroke

51 Ischaemic: non-haemorrhagic cerebral infarction

52 Haemorrhagic: intracerebral haemorrhage

Peripheral arterial disease

61 Peripheral artery disease

62 Aortic aneurysm

63 Renal artery stenosis

Sleep Apnoea syndrome

71 Sleep apnoea

99 not stated/inadequately described

Guide for use:

More than one medical condition may be recorded.

Record only those codes that apply.

Record all codes that apply.

Codes 21, 31, 51, 52, 61, 62, 63, and 71 must be accompanied by a Clinical evidence status code.

Acute coronary syndrome — DSS specific:

Angina

Code 11 — This code is used where there are symptoms, which can be described as chest pain or pressure, jaw pain, arm pain, or other equivalent discomfort suggestive of cardiac ischaemia, for more than the last two weeks.

Code 12 — This code is used where there are symptoms, which can be described as chest pain or pressure, jaw pain, arm pain, or other equivalent discomfort suggestive of cardiac ischaemia, only in the last two weeks.

Chronic lung disease

Code 21 —This code is used where there is a history or symptoms suggestive of chronic lung disease.

Heart failure

Code 31 —This code is used where a patient has past or current symptoms of heart failure (typically breathlessness or fatigue), either at rest or during exercise and/or signs of pulmonary or peripheral congestion suggestive of cardiac dysfunction.

Hypertension

Code 41 — This code is used where there is current use of pharmacotherapy for hypertension and/or clinical evidence of high blood pressure.

Stroke

Code 51 — This code is used if there is history of stroke or cerebrovascular accident (CVA) resulting from an ischaemic event where the patient suffered a loss of neurological function with residual symptoms remaining for at least 24 hours.

Code 52 — This code is used if there is history of stroke or cerebrovascular accident (CVA) resulting from a haemorrhagic event where the patient suffered a loss of neurological function with residual symptoms remaining for at least 24 hours.

Peripheral arterial disease

Code 61 — This code is used where there is history of either chronic or acute occlusion or narrowing of the arterial lumen in the aorta or extremities.

Code 62 — This code is used where there is a history of aneurysmal dilatation of the aorta (thoracic and or abdominal).

Code 63 — This code is used where there is history of functional stenosis of one or both renal arteries.

Sleep Apnoea syndrome

Code 71 — This code is used where there is evidence of sleep apnoea syndrome (SAS) on history.

Verification rules:

Collection methods:

Related metadata: Is qualified by the data element Clinical evidence status, version 1.

Is used in conjunction with the data element Fibrinolytic therapy status, version 1.

Information model link: NHIM Physical wellbeing

Data Set Specifications:	***Start date***	***End date***
DSS – Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 04/06/2004

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Registration authority: National Health Information Group.

Steward: The National Heart Foundation of Australia.
The Cardiac Society of Australia and New Zealand.

Comments:

Country of birth

Identifying and Definitional attributes

Knowledgebase ID: ***002004*** ***Version number:*** ***4***

Metadata type: Data element

Definition:	The country in which the person was born.
Context:	Country of birth is important in the study of access to services by different population sub-groups. Country of birth is the most easily collected and consistently reported of a range of possible data items that may indicate cultural or language diversity. Country of birth may be used in conjunction with other data elements such as Period of residence in Australia, etc., to derive more sophisticated measures of access to (or need for) services by different population sub-groups.

Relational and representational attributes

Data type: Numeric ***Maximum field size:*** 4

Representational class: Code ***Format:*** NNNN

Data domain:	Standard Australian Classification of Countries 1998 (SACC). Australian Bureau of Statistics Cat. no. 1269.0 Reference through: <http://www.abs.gov.au/Ausstats/abs@.nsf/StatsLibrary> Select 'ABS classifications'.
Guide for use:	The Standard Australian Classification of Countries 1998 (SACC) is a four-digit, three-level hierarchical structure specifying major group, minor group and country. A country, even if it comprises other discrete political entities such as 'states', is treated as a single unit for all data domain purposes. Parts of a political entity are not included in different groups. Thus, Hawaii is included in Northern America (as part of the identified country United States of America), despite being geographically close to and having similar social and cultural characteristics as the units classified to Polynesia.
Verification rules:	*NHDD* specific: DSS — Health care client identification: County of birth for newborn babies should be 'Australia'.
Collection methods:	Note that the Standard Australian Classification of Countries (SACC) is mappable to but not identical to Australian Standard Classification of Countries for Social Statistics (ASCCSS). Some data collections ask respondents to specify their country of birth. In others, a pre-determined set of countries is specified as part of the question, usually accompanied by an 'other (please specify)' category. Recommended questions are: In which country were you/was the person/was (name) born? Australia Other (please specify) Alternatively, a list of countries may be used based on, for example, common Census responses. In which country were you/was the person/was (name) born?

Australia
England
New Zealand
Italy
Viet Nam
Scotland
Greece
Germany
Philippines
India
Netherlands
Other (please specify)
In either case coding of data should conform to the SACC.
Sometimes respondents are simply asked to specify whether they were born in either 'English speaking' or 'non-English speaking' countries but this question is of limited use and this method of collection is not recommended.

Related metadata: Supersedes previous data element Country of birth, version 3.

Information model link: NHIM Demographic characteristic

Data Set Specifications:		***Start date***	***End date***
NMDS –	Admitted patient care	01/07/2004	
NMDS –	Admitted patient mental health care	01/07/2004	
NMDS –	Admitted patient palliative care	01/07/2004	
NMDS –	Alcohol and other drug treatment services	01/07/2004	
NMDS –	Community mental health care	01/07/2004	
NMDS –	Non-admitted patient Emergency Department care	01/07/2004	
NMDS –	Perinatal	01/07/2004	
NMDS –	Residential mental health care	01/07/2004	
DSS –	Acute coronary syndrome (clinical)	04/06/2004	
DSS –	Cardiovascular disease (clinical)	02/09/2003	
DSS –	Health care client identification	02/09/2003	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 02/09/2003

Source organisation: Australian Bureau of Statistics.
Health Data Standards Committee.
National Community Services Data Committee.

Source document: Australian Bureau of Statistics 1998. *Standard Australian Classification of Countries* 1998 (SACC). Cat. no. 1269.0. Canberra: ABS.
Reference through:
<http://www.abs.gov.au/Ausstats/abs@.nsf/StatsLibrary>

Registration authority: National Health Information Management Group.
National Community Services Information Management Group.

Steward:

Comments:

This metadata item is common to both the *National Health Data Dictionary* and the *National Community Services Data Dictionary*.

This data element is consistent with that used in the Australian Census of Population and Housing and is recommended for use whenever there is a requirement for comparison with Census data.

The Standard Australian Classification of Countries (SACC) supersedes the Australian Standard Classification of Countries for Social Statistics (ASCCSS).

Creatine kinase MB isoenzyme (CK-MB) — measured

Identifying and Definitional attributes

Knowledgebase ID: ***001030*** ***Version number:*** ***1***

Metadata type: Date element

Definition:	A person's measured creatine kinase MB isoenzyme (CK-MB).
Context:	Health care and clinical settings.

Relational and representational attributes

Data type: Numeric ***Maximum field size:*** 5

Representational class: Code ***Format:*** NNNNN

Data domain:	Measured value, 88888 Not measured 99999 Not stated/inadequately described

Guide for use:

Code 8888 if test for CK-MB was not done on this admission.

Measured in different units dependent upon laboratory methodology.

When only one CK-MB level is recorded, this should be the peak level during the admission.

For Acute coronary syndrome (ACS) reporting, can be used to determine diagnostic strata.

Verification rules:

Collection methods:

Related metadata:

Is a qualifier of Acute coronary syndrome stratum, version 1.

Is qualified by Creatine kinase MB isoenzyme (CK-MB) — units, version 1.

Is qualified by Creatine kinase MB isoenzyme (CK-MB) — upper limit of normal range, version 1.

Is used in conjunction with Date Creatine kinase MB isoenzyme (CK-MB) measured, version 1.

Is used in conjunction with Time Creatine kinase MB isoenzyme (CK-MB) measured, version 1.

Information model link: NHIM Service provision event

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 04/06/2004

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Registration authority:	National Health Information Group.
Steward:	The National Heart Foundation of Australia. The Cardiac Society of Australia and New Zealand.
Comments:	

Creatine kinase MB isoenzyme (CK-MB) — units

Identifying and Definitional attributes

Knowledgebase ID: ***001031*** ***Version number:*** ***1***

Metadata type: Data element

Definition:	The units used to measure the CK- MB.
Context:	Health care and clinical settings.

Relational and representational attributes

Data type: Numeric ***Maximum field size:*** 1

Representational class: Code ***Format:*** N

Data domain:	1	µg/L (micrograms per litre) (immunoassay)
	2	IU
	3	%
	4	index
	5	ng/dl
	6	kCat/l
	9	Not stated/inadequately described

Guide for use:

Verification rules:

Collection methods:

Related metadata: Is a qualifier of Creatine kinase MB isoenzyme (CK-MB) — measured, version 1.

Is a qualifier of Creatine kinase MB isoenzyme (CK-MB) — upper limit of normal range, version 1.

Is used in conjunction with Date creatine kinase MB isoenzyme (CK-MB) measured, version 1.

Information model link: NHIM Service provision event

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 04/06/2004

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Registration authority: National Health Information Group.

Steward: The National Heart Foundation of Australia.
The Cardiac Society of Australia and New Zealand.

Comments:

Creatine kinase MB isoenzyme (CK-MB) — upper limit of normal range

Identifying and Definitional attributes

Knowledgebase ID: ***001032*** ***Version number:*** ***1***

Metadata type: Data element

Definition:	Laboratory standard for the value of creatine kinase MB isoenzyme (CK-MB) that is the upper boundary of the normal reference range.
Context:	Health care and clinical settings.

Relational and representational attributes

Data type: Numeric ***Maximum field size:*** 4

Representational class: Quantitative value ***Format:*** NNNN

Data domain:	CK-MB value, or 9999 Not stated/Inadequately described

Guide for use: Record the upper limit of the CK-MB normal reference range for the testing laboratory.

Verification rules:

Collection methods:

Related metadata: Is qualified by Creatine kinase MB isoenzyme (CK-MB) — units, version 1.

Is a qualifier of Creatine kinase MB isoenzyme (CK-MB) — measured, version 1.

Is used in conjunction with Date creatine kinase MB isoenzyme (CK-MB) measured, version 1.

Information model link: NHIM Service provision event

Data Set Specifications:		***Start date***	***End date***
DSS —	Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 04/06/2004

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Registration authority: National Health Information Group.

Steward: The National Heart Foundation of Australia.

The Cardiac Society of Australia and New Zealand.

Comments:

Creatinine serum — measured

Identifying and Definitional Attributes

Knowledgebase ID:	***000655***	***Version number:***	***1***
Metadata type:	Data element		

Definition:	A person's measured serum creatinine.
Context:	Clinical settings and population survey: Serum creatinine can be used to help determine renal function. Serum creatinine by itself is an insensitive measure of renal function because it does not reliably increase above the normal range until more than 50% of renal function has been lost.

Relational and Representational Attributes

Data type:	Numeric	***Maximum field size:***	4
Representational class:	Quantitative value	***Format:***	NNNN

Data domain:	Measured in µmol/L (micromoles per litre)

Guide for use:

Record the absolute result of the most recent serum creatinine measurement.

Note: If the measurement is obtained in mmol/L it is to be multiplied by 1000.

Serum creatinine together with a patient's age, weight and sex can be used to calculate glomerular filtration rate (GFR), which is an indicator of renal status/function. The calculation uses the Cockcroft-Gault formula.

DSS – Diabetes (clinical):

Record absolute result of the most recent serum creatinine measurement in the last 12 months to the nearest µmol/L (micromoles per litre)

Verification rules:

Collection methods:

Measurement of creatinine should be carried out by laboratories, or practices, which have been accredited to perform these tests by the National Association of Testing Authority.

- Single venous blood test taken at the time of other screening blood tests.
- Fasting not required.

Related metadata:

Is used in conjunction with Date of birth, version 4.

Relates to the data element Diabetes status, version 1.

Is used in conjunction with Renal disease – end stage, diabetes complication, version 1.

Is used in conjunction with Service contact date, version 1.

Is used in conjunction with Sex, version 3.

Is used in conjunction with Weight – measured, version 2.

Information model link: NHIM Service provision event

Data Set Specifications:		*Start date*	*End date*
DSS –	Acute coronary syndrome (clinical)	04/06/2004	
DSS –	Cardiovascular disease (clinical)	01/01/2003	
DSS –	Diabetes (clinical)	01/01/2003	

Administrative Attributes

Admin. status: CURRENT ***Effective Date:*** 01/01/2003

Source organisation: CV-Data Working Group

National Diabetes Data Working Group

Source document: Caring for Australians with Renal Impairment (CARI) Guidelines. Australian Kidney Foundation

Registration authority: National Health Information Group.

Steward: The National Heart Foundation of Australia.

The Cardiac Society of Australia and New Zealand.

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.

There is no agreed standard as to which units serum creatinine should be recorded in.

In combination with age, sex and body weight, it could be used for a more accurate assessment of renal function.

Creatinine is normally produced in fairly constant amounts in the muscles, as a result the breakdown of phosphocreatine. It passes into the blood and is excreted in the urine. Serum creatinine can be used to help determine renal function. The elevation in the creatinine level in the blood indicates disturbance in kidney function.

GFR decreases with age, but serum creatinine remains relatively stable. When serum creatinine is measured, renal function in the elderly tends to be overestimated, and GFR should be used to assess renal function, according to the Cockcroft-Gault formula:

$$\text{GFR (ml/min)} = \frac{(140 - \text{age [yrs]}) \times \text{body wt (kg)}}{814 \times \text{serum creatinine (mmol/l)}} \left[\times 0.85 \text{ (for women)} \right]$$

To determine chronic renal impairment

GFR > 90 ml/min: normal

GFR > 60 – 90 ml/min: mild renal impairment

GFR > 30 – 60 ml/min: moderate renal impairment

GFR 0 – 30 ml/min: severe renal impairment

Note: The above GFR measurement should be for a period greater than 3 months. GFR may also be assessed by 24-hour creatinine clearance adjusted for body surface area.

In general, patients with GFR < 30 ml/min are at high risk of progressive deterioration in renal function and should be referred to a nephrology service for specialist management of renal failure.

Patients with rapidly declining renal function or clinical features to suggest that residual renal function may decline rapidly (ie. hypertensive, proteinuric (> 1 g/24 hours), significant comorbid illness) should be considered for referral to a nephrologist well before function declines to less than 30 ml/min. (CARI Guidelines 2002. Australian Kidney Foundation). Patients in whom the cause of renal impairment is uncertain should be referred to a nephrologist for assessment.

Date creatine kinase MB isoenzyme (CK-MB) measured

Identifying and Definitional attributes

Knowledgebase ID: ***001033*** ***Version number:*** ***1***

Metadata type: Data element

Definition:	The date a Creatine kinase MB isoenzyme (CK-MB) is measured.
Context:	Health care and clinical settings.

Relational and representational attributes

Data type: Numeric ***Maximum field size:*** 8

Representational class: Date ***Format:*** DDMMYYYY

Data domain:	Valid date.

Guide for use: This data element pertains to the measuring of CK-MB isoenzyme at any time point during this current event.

Verification rules:

Collection methods:

Related metadata: Is used in conjunction with Creatine kinase MB isoenzyme (CK-MB) – measured, version 1.

Is used in conjunction with Creatine kinase MB isoenzyme (CK-MB) – units, version 1.

Is used in conjunction with Creatine kinase MB isoenzyme (CK-MB) – upper limit of normal range, version 1.

Is used in conjunction with Time Creatine kinase MB isoenzyme (CK-MB) measured, version 1.

Information model link: NHIM Service provision event

Data Set Specifications:	***Start date***	***End date***
DSS – Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 04/06/2004

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Registration authority: National Health Information Group.

Steward: The National Heart Foundation of Australia.

The Cardiac Society of Australia and New Zealand.

Comments:

Date of birth

Identifying and Definitional attributes

Knowledgebase ID:	***002005***	***Version number:***	***5***
Metadata type:	Data element		

Definition:	The date of birth of the person.
Context:	Required for a range of clinical and administrative purposes. Date of birth enables derivation of age for use in demographic analyses, assists in the unique identification of clients if other identifying information is missing or in question, and may be required for the derivation of other data elements (e.g. Diagnosis related group for admitted patients).

Relational and representational attributes

Data type:	Numeric	***Maximum field size:***	8
Representational class:	Date	***Format:***	DDMMYYYY

Data domain:	Valid date.

Guide for use:

If date of birth is not known or cannot be obtained, provision should be made to collect or estimate age. Collected or estimated age would usually be in years for adults, and to the nearest three months (or less) for children aged less than two years. Additionally, an estimated date flag should be reported in conjunction with all estimated dates of birth.

For data collections concerned with children's services, it is suggested that the estimated Date of birth of children aged under 2 years should be reported to the nearest 3 month period, i.e. 0101, 0104, 0107, 0110 of the estimated year of birth. For example, a child who is thought to be aged 18 months in October of one year would have his/her estimated Date of birth reported as 0104 of the previous year. Again, an estimated date flag should be reported in conjunction with all estimated dates of birth.

Verification rules:

Collection methods:

Information on Date of birth can be collected using the one question:

What is your/(the person's) date of birth?
In self-reported data collections, it is recommended that the following response format is used:
Date of birth: _ _ / _ _ / _ _ _ _
This enables easy conversion to the preferred representational layout (DDMMYYYY).

Estimated dates of birth should be identified by an appropriate estimated date flag to prevent inappropriate use of Date of birth data for record identification and/or the derivation of other data elements that require accurate date of birth information.

***NHDD* specific:**

NMDS – Perinatal:

Data collection systems must be able to differentiate between the date of birth of the mother and the baby(s). This is important in the Perinatal data collection as the date of birth of the baby is used to determine the antenatal length of stay and the postnatal length of stay.

Related metadata: Supersedes previous data element Date of birth, version 4.

Relates to the data element Additional diagnosis, version 4.

Relates to the data element Complication of labour and delivery, version 2.

Relates to the data element Complications of pregnancy, version 2.

Relates to the data element Congenital malformations, version 2.

Relates to the data element External cause – admitted patient, version 4.

Relates to the data element Maternal medical conditions, version 2.

Relates to the data element Neonatal morbidity, version 2.

Relates to the data element Postpartum complication, version 2.

Relates to the data element Principal diagnosis, version 3.

Information model link: NHIM Demographic characteristic

Data Set Specifications:		***Start date***	***End date***
NMDS –	Admitted patient care	01/07/2004	
NMDS –	Admitted patient mental health care	01/07/2004	
NMDS –	Admitted patient palliative care	01/07/2004	
NMDS –	Alcohol and other drug treatment services	01/07/2004	
NMDS –	Community mental health care	01/07/2004	
NMDS –	Health labour force	01/07/2004	
NMDS –	Non-admitted patient Emergency Department care	01/07/2004	
NMDS –	Perinatal	01/07/2004	
NMDS –	Residential mental health care	01/07/2004	
DSS –	Acute coronary syndrome (clinical)	04/06/2004	
DSS –	Cardiovascular disease (clinical)	02/09/2003	
DSS –	Diabetes (clinical)	02/09/2003	
DSS –	Health care client identification	02/09/2003	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 02/09/2004

Source organisation: Health Data Standards Committee.

National Community Services Data Committee.

Source document: AIHW: 2003. *National Health Data Dictionary*, Version 12.

Registration authority: National Health Information Management Group.

National Community Services Information Management Group.

Steward:

Comments: This metadata item is common to both the *National Health Data Dictionary* and the *National Community Services Data Dictionary*.

Privacy issues need to be taken account in asking persons their date of birth.

Wherever possible and wherever appropriate, Date of birth should be used rather than Age because the actual date of birth allows more precise calculation of age.

When Date of birth is estimated or default value, national health and community services collections typically use 0101 or 0107 or 3006 as the estimate or default for DDMM.

It is suggested that different rules for reporting data may apply when estimating the Date of birth of children aged under 2 years because of the rapid growth and development of children within this age group which means that a child's development can vary considerably over the course of a year. Thus, more specific reporting of estimated age is suggested.

***NHDD* specific:**

DSS — Health care client identification:

Any new information collection systems should allow for 0000YYYY. (Refer to Standards Australia AS5017—2002 Health Care Client Identification).

DSS — Cardiovascular disease (clinical)

Age is an important non-modifiable risk factor for cardiovascular conditions.

The prevalence of cardiovascular conditions increases dramatically with age.

For example, more than 60% of people aged 75 and over had a cardiovascular condition in 1995 compared with less than 9% of those aged under 35.

Aboriginal and Torres Strait Islander peoples are more likely to have cardiovascular conditions than other Australians across almost all age groups.

For example, in the 25 — 44 age group, 23% of Indigenous Australians reported cardiovascular conditions compared with 16% among other Australians (Heart, Stroke and Vascular Diseases: Australian Facts 2001. AIHW).

Date of first angioplasty balloon inflation or stenting

Identifying and Definitional attributes

Knowledgebase ID: ***001034*** ***Version number:*** ***1***

Metadata type: Data element

Definition:	The date of the first angioplasty balloon inflation or stent placement.
Context:	Health care and clinical settings.

Relational and representational attributes

Data type: Numeric ***Maximum field size:*** DDMMYYYY

Representational class: Date ***Format:*** 8

Data domain:	Valid date.

Guide for use: For Acute Coronary Syndrome (ACS) reporting, refers to the Date of first angioplasty balloon inflation or coronary stenting for this admission.

Verification rules: For Acute Coronary Syndrome (ACS) reporting, must be the same as, or later than the Date of triage.

Collection methods:

Related metadata: Is used in conjunction with Acute coronary syndrome procedure type, version 1.

Is used in conjunction with Time of first angioplasty balloon inflation or stenting, version 1.

Is used in conjunction with Date of triage, version 1.

Is used in conjunction with Time of triage, version 1.

Information model link: NHIM Service provision event

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 04/06/2004

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Registration authority: National Health Information Group.

Steward: The National Heart Foundation of Australia.

The Cardiac Society of Australia and New Zealand.

Comments:

Date of intravenous fibrinolytic therapy

Identifying and Definitional attributes

Knowledgebase ID: ***001035*** ***Version number:*** ***1***

Metadata type: Data element

Definition:	The date intravenous (IV) fibrinolytic therapy was administered or initiated.
Context:	Health care and clinical settings.

Relational and representational attributes

Data type: Numeric ***Maximum field size:*** 8

Representational class: Date ***Format:*** DDMMYYYY

Data domain:	Valid date.

Guide for use: For Acute coronary syndrome (ACS) reporting, refers to coronary arteries. If initiated by a bolus dose whether in a pre-hospital setting, emergency department or inpatient unit/ward, the date the initial bolus was administered should be reported.

Verification rules:

Collection methods:

Related metadata: Is used in conjunction with Acute coronary syndrome procedure type, version 1.
Is used in conjunction with Date of triage, version 1.
Is used in conjunction with Time of triage, version 1.
Is used in conjunction with Fibrinolytic drug used, version 1.
Is used in conjunction with Time of intravenous fibrinolytic therapy, version 1.

Information model link: NHIM Service provision event

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 04/06/2004

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Registration authority: National Health Information Group.

Steward: The National Heart Foundation of Australia.
The Cardiac Society of Australia and New Zealand.

Comments:

Date of referral to rehabilitation

Identifying and Definitional Attributes

Knowledgebase ID: ***000656*** ***Version number:*** ***1***

Metadata type: Data Element

Definition:	The date on which a person is referred to a rehabilitation service.
Context:	Clinical settings.

Relational and Representational Attributes

Data type: Numeric ***Maximum field size:*** 8

Representational class: Date ***Format:*** DDMMYYYY

Data domain:	Valid date

Guide for use: If date of referral is not known then provision should be made to collect month and year as a minimum, using 01 as DD if only the month and year are known.

Verification rules:

Collection methods: To be collected at the time of commencement of rehabilitation.

Related metadata: Relates to the data element Date of diagnosis, version 1.
Relates to the data element Vascular history, version 1.
Relates to the data element Vascular procedures, version 1.

Information model link: NHIM Service provision event

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	
DSS –	Cardiovascular disease (clinical)	01/01/2003	

Administrative Attributes

Admin. status: CURRENT ***Effective Date:*** 01/01/2003

Source organisation: CV-Data Working Group

Source document:

Registration authority: National Health Information Group.

Steward:

Comments: Required to derive those referred to a rehabilitation service from those eligible to attend and who actually attend. This data element can be used to determine the time lag between referral and commencement of rehabilitation.

Date of triage

Identifying and Definitional Attributes

Knowledgebase ID: ***000353*** ***Version number:*** ***1***

Metadata type: Data element

Definition:	The day on which the patient is triaged.
Context:	Admitted patient care: Required to identify the commencement of the service and calculation of waiting times.

Relational and Representational Attributes

Data type:	Numeric	***Maximum field size:***	8
Representational class:	Date	***Format:***	DDMMYYYY

Data domain:	Valid date

Guide for use:

Verification rules:

Collection methods:

Related metadata: Relates to the data element Emergency department waiting time to service delivery, version 2.

Relates to the data element concept Patient presentation at emergency department, version 1.

Relates to the data element Time of triage, version 1.

Information model link: NHIM Assessment event

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	

Administrative Attributes

Admin. status: CURRENT ***Effective Date:*** 01/07/1998

Source document:

Source organisation: National Institution Based Ambulatory Model Reference Group

National Health Data Committee

Registration authority: National Health Information Group.

Steward:

Comments:

Date patient presents

Identifying and Definitional Attributes

Knowledgebase ID: ***000350*** ***Version number:*** ***2***

Metadata type: Data element

Definition:	The day on which the patient/client presents for the delivery of a service.
Context:	Admitted patient care. Community health care. Hospital non-admitted patient care: Required to identify commencement of a visit and for calculation of waiting times.

Relational and Representational Attributes

Data type:	Numeric	***Maximum field size:***	8
Representational class:	Date	***Format:***	DDMMYYYY

Data domain:	Valid date

Guide for use:

For community health care, outreach services and services provided via telephone or telehealth, this may be the date on which the service provider presents to the patient or the telephone/telehealth session commences.

The time of patient presentation at the emergency department is the earliest occasion of being registered clerically or triaged.

The date that the patient presents is not necessarily:

- the listing date for care (see Listing date for care data element concept), nor
- the date on which care is scheduled to be provided, nor
- the date on which commencement of care actually occurs (for admitted patients see Admission date, for hospital non-admitted patient care and community health care see Date of commencement of service event).

Verification rules:

Collection methods:

Related metadata:

Relates to the data element Admission date, version 4.

Relates to the data element Date of commencement of service event, version 2.

Relates to the data element Date of triage, version 1.

Supersedes previous data element Date patient presents, version 1.

Relates to the data element Emergency department waiting time to admission, version 1.

Relates to the data element Emergency department waiting time to service delivery, version 2.

Relates to the data element concept Patient presentation at emergency department, version 2.

Relates to the data element Time of commencement of service event, version 2.

Relates to the data element Time of triage, version 1.
Relates to the data element Time patient presents, version 2.
Relates to the data element Triage category, version 2.
Relates to the data element Type of visit to emergency department, version 2.

Information model link: NHIM Request for/entry into service event

Data Set Specifications:		***Start date***	***End date***
NMDS –	Non-admitted patient emergency department care	01/07/2003	
DSS –	Acute coronary syndrome (clinical)	04/06/2004	

Administrative Attributes

Admin. status: CURRENT ***Effective Date:*** 01/07/2001

Source document:

Source organisation: National Institution Based Ambulatory Model Reference Group
National Health Data Committee

Registration authority: National Health Information Group.

Steward:

Comments:

Date troponin measured

Identifying and Definitional attributes

Knowledgebase ID: ***001036*** ***Version number:*** ***1***

Metadata type: Data element

Definition:	Date the troponin assay is measured.
Context:	Health care and clinical settings.

Relational and representational attributes

Data type: Numeric ***Maximum field size:*** 8

Representational class: Date ***Format:*** DDMMYYYY

Data domain:	Valid date.

Guide for use: This data element pertains to the measuring of troponin at any time point during this current event.

Verification rules:

Collection methods:

Related metadata: Is used in conjunction with Time troponin measured, version 1.
Is used in conjunction with Troponin measured, version 1.
Is used in conjunction with Troponin assay type, version 1.
Is used in conjunction with Troponin assay – upper limit of normal, version 1.

Information model link: NHIM Service provision event

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 04/06/2004

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Registration authority: National Health Information Group.

Steward: The National Heart Foundation of Australia.
The Cardiac Society of Australia and New Zealand.

Comments:

Diabetes status

Identifying and Definitional Attributes

Knowledgebase ID: 000654 ***Version number:*** 1

Metadata type: Data element

Definition:	Identifies a person with or at risk of diabetes.
Context:	Public health, health care and clinical settings.

Relational and Representational Attributes

Data type: Numeric ***Maximum field size:*** 2

Representational class: Code ***Format:*** NN

Data domain:	01	Type 1 diabetes
	02	Type 2 diabetes
	03	Gestational diabetes mellitus (GDM)
	04	Other (secondary diabetes)
	05	Previous gestational diabetes mellitus (GDM)
	06	Impaired fasting glucose (IFG)
	07	Impaired glucose tolerance (IGT)
	08	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 domains 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 IFG (impaired fasting glycaemia) or IGT (impaired glucose tolerance) 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.

Verification rules:

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

DSS – Diabetes (clinical):

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

Related metadata: Relates to the data element Date of diagnosis, version 1.

Relates to the data element Diabetes therapy type, version 1.

Is used in conjunction with Service contact date, version 1.

Information model link: NHIM Physical wellbeing

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	
DSS –	Cardiovascular disease (clinical)	01/01/2003	
DSS –	Diabetes (clinical)	01/01/2003	

Administrative Attributes

Admin. status: CURRENT ***Effective Date:*** 01/01/2003

Source organisation: CV-Data Working Group

National Diabetes Data Working Group

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).

Registration authority: National Health Information Group.

Steward:

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 diabetes.

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 & Ageing 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).

Electrocardiogram (ECG) change — location

Identifying and Definitional attributes

Knowledgebase ID: ***001037*** ***Version number:*** ***1***

Metadata type: Data element

Definition:	Describes the area in which the change is located on the 12-lead electrocardiogram (ECG).
Context:	Health care and clinical settings.

Relational and representational attributes

Data type: Numeric ***Maximum field size:*** 1

Representational class: Code ***Format:*** N

Data domain:	1	Inferior leads: II, III, aVF
	2	Anterior leads: V1 to V4
	3	Lateral leads: I, aVL, V5 to V6
	4	True posterior: V1 V2
	8	None
	9	Not stated/inadequately described

Guide for use: Code 4 True posterior is relevant only for tall R waves.

More than one code may be recorded.

Report in order of significance.

Record all codes that apply (codes 8 and 9 are excluded from multiple coding).

Verification rules:

Collection methods:

Related metadata: Used in conjunction with the data element Electrocardiogram (ECG) change – type, version 1.

Information model link: NHIM Service provision event

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 04/06/2004

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Registration authority: National Health Information Group.

Steward: The National Heart Foundation of Australia.
The Cardiac Society of Australia and New Zealand.

Comments:

Electrocardiogram (ECG) change — type

Identifying and Definitional attributes

Knowledgebase ID: ***001038*** ***Version number:*** ***1***

Metadata type: Data element

Definition:	Describes the type of change to the heart rhythm seen on the electrocardiogram (ECG).
Context:	Acute coronary syndrome treatment settings.

Relational and representational attributes

Data type: Numeric ***Maximum field size:*** 1

Representational class: Code ***Format:*** N

Data domain:

1	ST-segment elevation ≥ 1 mm (0.1 mV) in ≥ 2 contiguous limb leads
2	ST-segment elevation ≥ 2 mm (0.2 mV) in ≥ 2 contiguous chest leads
3	ST-segment depression ≥ 0.5 mm (0.05 mV) in ≥ 2 contiguous leads (includes reciprocal changes)
4	T-wave inversion ≥ 1 mm (0.1 mV)
5	Significant Q waves
6	Bundle branch block (BBB)
7	Non-specific
8	No changes
9	Not stated/inadequately described

Guide for use:

For Acute coronary syndrome (ACS) reporting, used to determine diagnostic strata.

More than one code may be recorded.

Record all that apply (codes 7, 8 and 9 are excluded from multiple coding).

Code 1	ST-segment elevation indicates greater than or equal to 1 mm (0.1 mV) elevation in 2 or more contiguous limb leads
Code 2	ST-segment elevation indicates greater than or equal to 2 mm (0.2 mV) elevation in 2 or more contiguous chest leads
Code 3	ST-segment depression of at least 0.5 mm (0.05 mV) in 2 or more contiguous leads (includes reciprocal changes)
Code 4	T-wave inversion of at least 1 mm (0.1 mV) including inverted T waves that are not indicative of acute MI
Code 5	Q waves refer to the presence of Q waves that are greater than or equal to 0.03 seconds in width and greater than or equal to 1 mm (0.1 mV) in depth in at least 2 contiguous leads
Code 6	Bundle branch block pattern
Code 7	Changes not meeting the above criteria
Code 8	No ECG changes

Code 9 includes unknown

Verification rules:

Collection methods:

Related metadata: Is a qualifier of Acute coronary syndrome stratum, version 1.

Is used in conjunction with the data element Acute coronary syndrome procedure type, version 1.

Is used in conjunction with Electrocardiogram (ECG) change — location, version 1.

Is used in conjunction with Date of triage, version 1.

Is used in conjunction with Time of triage, version 1.

Information model link: NHIM Service provision event

Data Set Specifications:		***Start date***	***End date***
DSS —	Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 04/06/2004

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Registration authority: National Health Information Group.

Steward: The National Heart Foundation of Australia.

The Cardiac Society of Australia and New Zealand.

Comments:

Fibrinolytic drug used

Identifying and Definitional attributes

Knowledgebase ID: ***001039*** ***Version number:*** ***1***

Metadata type: Data element

Definition:	Identifies the fibrinolytic drug used.
Context:	Health care and clinical settings.

Relational and representational attributes

Data type: Numeric ***Maximum field size:*** 1

Representational class: Code ***Format:*** N

Data domain:	1	Streptokinase
	2	t-PA (Tissue Plasminogen Activator) (Alteplase),
	3	r-PA (Reteplase)
	4	TNK t-PA (Tenecteplase)
	9	Not stated/ inadequately described

Guide for use: For Acute coronary syndrome (ACS) reporting, this data element pertains to the administering of fibrinolytic therapy drugs at any time point during this current event.

Verification rules:

Collection methods:

Related metadata: Is used in conjunction with Date of intravenous fibrinolytic therapy, version 1.

Is used in conjunction with Time of intravenous fibrinolytic therapy, version 1.

Information model link: NHIM Physical wellbeing

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 04/06/2004

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Registration authority: National Health Information Group.

Steward: The National Heart Foundation of Australia.
The Cardiac Society of Australia and New Zealand.

Comments:

Fibrinolytic therapy status

Identifying and Definitional attributes

Knowledgebase ID:	***001040***	***Version number:***	***1***
Metadata type:	Data element		

Definition:	Identifies the person's fibrinolytic therapy status.
Context:	Health care and clinical settings.

Relational and representational attributes

Data type:	Numeric	***Maximum field size:***	2
Representational class:	Code	***Format:***	NN

Data domain:	10	Given
	21	Not given — therapy not indicated
	22	Not given — patient refusal
	23	Not given — previous haemorrhagic stroke at any time; other strokes or cerebrovascular events within 1 year
	24	Not given — known intracranial neoplasm
	25	Not given — active or recent (within 2 to 4 weeks) internal bleeding (does not include menses)
	26	Not given — suspected aortic dissection
	27	Not given — severe uncontrolled hypertension on presentation (blood pressure >180 mmHg systolic and/or 110 mmHg diastolic). Note: This could be an absolute contraindication in low-risk patients with MI.
	28	Not given — history of prior cerebrovascular accident or known intracerebral pathology not covered in 2.3 & 2.4 contraindications
	29	Not given — current use of anticoagulants in therapeutic doses (INR greater than or equal to 2); known bleeding diathesis
	30	Not given — recent trauma (within 2 to 4 weeks), including head trauma, traumatic or prolonged (greater than 10 minutes) CPR, or major surgery (less than 3 weeks)
	31	Not given — pregnancy
	32	Not given — other
	90	Not stated/inadequately described

Guide for use:	More than one code may be recorded for the following codes: 23, 24, 25, 26, 27, 28, 29, 30 and 31. For Acute coronary syndrome (ACS) reporting, to be collected with the data elements Date of triage, Time of triage and Acute coronary syndrome stratum. This data element pertains to the administering of fibrinolytic therapy drugs at any time point during this current event.
Verification rules:	
Collection methods:	
Related metadata:	Is used in conjunction with Acute coronary syndrome procedure type, version 1.

Is used in conjunction with Date of triage, version 1.

Is used in conjunction with Time of triage, version 1.

Is used in conjunction with Time of intravenous fibrinolytic therapy, version 1.

Is used in conjunction with Date of intravenous fibrinolytic therapy, version 1.

Is used in conjunction with the data element Clinical procedure timing status, version 1.

Information model link: NHIM Physical wellbeing

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 04/06/2004

Registration authority: National Health Information Group.

Steward: The National Heart Foundation of Australia.
The Cardiac Society of Australia and New Zealand.

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Comments:

Functional stress test element

Identifying and Definitional attributes

Knowledgebase ID: ***001041*** ***Version number:*** ***1***

Metadata type: Data element

Definition:	Identifies the element included in an electrocardiogram stress test.
Context:	Health care and clinical settings.

Relational and representational attributes

Data type: Numeric ***Maximum field size:*** 1

Representational class: Code ***Format:*** N

Data domain:	1	ECG monitoring
	2	Echocardiography
	3	Radionuclide (perfusion) imaging (e.g. Thallium, Sestamibi)
	9	Not stated/inadequately described

Guide for use: More than one code may be recorded (code 9 is excluded from multiple coding).

Verification rules:

Collection methods:

Related metadata: Is a qualifier of Functional stress test ischaemic result, version 1.

Information model link: NHIM Service provision event

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 04/06/2004

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Registration authority: National Health Information Group.

Steward: The National Heart Foundation of Australia.
The Cardiac Society of Australia and New Zealand.

Comments:

Functional stress test ischaemic result

Identifying and Definitional attributes

Knowledgebase ID:	***001041***	***Version number:***	***1***
Metadata type:	Data element		

Definition:	Indicates the result of the person's electrocardiogram stress in terms of ischaemic outcome.
Context:	Health care and clinical settings.

Relational and representational attributes

Data type:	Numeric	***Maximum field size:***	1
Representational class:	Code	***Format:***	N

Data domain:	1	Not done
	2	Positive
	3	Negative
	4	Equivocal
	9	Not stated/inadequately described

Guide for use: For Acute coronary syndrome (ACS) reporting, can be used to determine diagnostic strata.

Code 2. Positive:

On an exercise tolerance test, the patient developed either:

a. Both ischaemic discomfort and ST shift greater than or equal to 1 mm (0.1 mV) (horizontal or downsloping) or

b. New ST shift greater than or equal to 2 mm (0.2 mV) (horizontal or down-sloping) believed to represent ischaemia even in the absence of ischaemic discomfort.

On cardiac imaging investigation (e.g. exercise thallium or MIBI test, stress echocardiography, or dipyridamole, thallium, or adenosine radioisotope scan)

a. Evidence of reversible ischaemia on nuclear imaging of the myocardium

b. Evidence of inducible ischaemic response during echocardiographic imaging of the myocardium

If the patient had an equivalent type of exercise test but a definite evidence of ischaemia on cardiac imaging (e.g. an area of clear reversible ischaemia), this should be considered a positive test.

Code 3. Negative: No evidence of ischaemia (i.e. no typical angina pain and no ST shifts).

Code 4. Equivocal: Either:

a. Typical ischaemic pain but no ST shift greater than or equal to 1 mm (0.1 mV) (horizontal or downsloping) or

ST shift of 1 mm (0.1 mV) (horizontal or downsloping) but no ischaemic discomfort.

b. Defect on myocardial imaging of uncertain nature or significance.

Verification rules:

Collection methods: May be collected as part of Acute coronary syndrome (ACS) reporting.

Related metadata: Is a qualifier of Acute coronary syndrome stratum, version 1.

Is qualified by Functional stress test element, version 1.

Is used in conjunction with the data element Clinical procedure timing status, version 1.

Information model link: NHIM Physical wellbeing

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 04/06/2004

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Registration authority: National Health Information Group.

Steward: The National Heart Foundation of Australia.

The Cardiac Society of Australia and New Zealand.

Comments:

Glycoprotein IIb/IIIa receptor antagonist status

Identifying and Definitional attributes

Knowledgebase ID:	***001042***	***Version number:***	***1***
Metadata type:	Data element		

Definition:	Identifies the person's glycoprotein IIb/IIIa receptor antagonist therapy status.
Context:	Health care and clinical settings.

Relational and representational attributes

Data type:	Numeric	***Maximum field size:***	2
Representational class:	Code	***Format:***	NN

Data domain:	10	Given
	21	Not given — therapy not indicated
	22	Not given — patient refusal
	23	Not given — known intracranial neoplasm
	24	Not given — active or recent (within 2 to 4 weeks) internal bleeding (does not include menses). Suspected aortic dissection
	25	Not given — history of prior cerebrovascular accident or known intracerebral pathology not covered in contraindications
	26	Not given — recent trauma (within 2 to 4 weeks), including head trauma, traumatic or prolonged (greater than 10 minutes) CPR, or major surgery (less than 3 weeks)
	27	Not given — pregnancy
	28	Not given — other
	90	Not stated/inadequately described

Guide for use: If recording 'Not given', record the principal reason if more than one code applies.

This data element pertains to the administering of Glycoprotein IIb/IIIa receptor antagonist therapy drugs at any time point during this current event.

Verification rules:

Collection methods:

Related metadata:

Information model link: NHIM Physical wellbeing

Data Set Specifications:	***Start date***	***End date***
DSS – Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status:	CURRENT	***Effective Date:***	04/06/2004

Source organisation:	Acute Coronary Syndrome Data Working Group.
Source document:	
Registration authority:	National Health Information Group.
Steward:	The National Heart Foundation of Australia. The Cardiac Society of Australia and New Zealand.
Comments:	

Heart rate

Identifying and Definitional attributes

Knowledgebase ID: ***001043*** ***Version number:*** ***1***

Metadata type: Data element

Definition:	The person's heart rate in beats per minute.
Context:	Health care and clinical settings.

Relational and representational attributes

Data type: Numeric ***Maximum field size:*** 3

Representational class: Quantitative value ***Format:*** NNN

Data domain:	997	Cardiac arrest
	998	Not recorded
	999	Not stated/inadequately described

Guide for use: Measurement expressed in beats per minute.

Verification rules:

Collection methods: For Acute coronary syndrome (ACS) reporting, collected at time of presentation. If heart rate is not recorded at the exact time of presentation, record the first heart rate measured closest to the time of presentation.

Related metadata: is used in conjunction with Time patient presents, version 2

is used in conjunction with Heart rhythm type, version 1

Information model link: NHIM Service provision event

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 04/06/2004

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Registration authority: National Health Information Group.

Steward: The National Heart Foundation of Australia.

The Cardiac Society of Australia and New Zealand.

Comments:

Heart rhythm type

Identifying and Definitional attributes

Knowledgebase ID:	***001044***	***Version number:***	***1***
Metadata type:	Data element		

Definition:	The type of rhythm associated with the beating of the heart as determined from the electrocardiogram (ECG).
Context:	Health care and clinical settings.

Relational and representational attributes

Data type:	Numeric	***Maximum field size:***	2
Representational class:	Code	***Format:***	NN

Data domain:	1	Sinus rhythm
	2	Atrial fibrillation
	3	Atrial flutter
	4	Second degree heart block
	5	Complete heart block
	6	Supraventricular tachycardia
	7	Idioventricular rhythm
	8	Ventricular tachycardia
	9	Ventricular fibrillation
	10	Paced
	11	Other rhythm
	99	Not stated/inadequately described

Guide for use: For Acute coronary syndrome (ACS) reporting, the ECG used for assessment on presentation.

Collection methods:

Related metadata: Is a qualifier of Reason for readmission – acute coronary syndrome, version 1.

Is used in conjunction with Date of triage, version 1.

Is used in conjunction with Time of triage, version 1.

Is used in conjunction with Heart rate, version 1.

Is used in conjunction with the data element Acute coronary syndrome procedure type, version 1.

Is used in conjunction with the data element Electrocardiogram (ECG) change — type, version 1.

Information model link: NHIM Physical wellbeing

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status:	CURRENT	***Effective Date:***	04/06/2004
Source organisation:	Acute Coronary Syndrome Data Working Group.		
Source document:			
Registration authority:	National Health Information Group.		
Steward:	The National Heart Foundation of Australia. The Cardiac Society of Australia and New Zealand.		
Comments:			

Height — self-reported

Identifying and Definitional Attributes

Knowledgebase ID: 000363 ***Version number:*** 2

Metadata type: Data Element

Definition:	A person's self-reported height.
Context:	Public health and health care: Stature is a major indicator of general body size and of bone length and of nutritional and health status of the individual and the community at large. It is important in screening for disease or malnutrition, and in the interpretation of weight (Lohman et al. 1988). Shortness is known to be a predictor of all cause mortality and coronary heart disease mortality in middle aged men (Marmot et al. 1984) and of less favourable gestational outcomes in women (Kramer 1988). Self-reported or parentally reported height for children and adolescents should be used cautiously if at all. It enables the calculation of body mass index which requires the measurement of height and weight (body mass) for adults.

Relational and Representational Attributes

Data type: Numeric ***Maximum field size:*** 3

Representational class: Quantitative value ***Format:*** NNN

Data domain:	Measurement in centimetres to the nearest centimetre 888 Unknown 999 Not stated/inadequately described

Guide for use:

Verification rules:

Collection methods:

The method of data collection, e.g. face to face interview, telephone interview or self-completion questionnaire, can affect survey estimates and should be reported.

The data collection form should include a question asking the respondent what their height is. For example, the Australian Bureau of Statistics' National Health Survey 1995 included the question 'How tall are you without shoes?'. The data collection form should allow for both metric (to the nearest 1 cm) and imperial (to the nearest 0.5 inch) units to be recorded.

If practical, it is preferable to enter the raw data into the database before conversion of measures in imperial units to metric. However if this is not possible, height reported in imperial units can be converted to metric prior to data entry using a conversion factor of 2.54 cm to the inch.

Rounding to the nearest 1 cm will be required for measures converted to metric prior to data entry, and may be required for data reported in metric units to a greater level of precision than the nearest 1 cm. The following rounding conventions are desirable to reduce systematic over-reporting (Armitage & Berry 1994):

nnn.x where x < 5 – round down, e.g. 172.2 cm would be rounded to 172 cm.

nnn.x where x > 5 – round up, e.g. 172.7 cm would be rounded to 173 cm.

nnn.x where x = 5 – round to the nearest even number, e.g. 172.5 cm would be

rounded to 172 cm, while 173.5 cm would be rounded to 174 cm.

Related metadata: Supersedes previous data element Adult height – self-reported, version 1.
Is used in the calculation of Body mass index, version 2.

Information model link: NHIM Physical characteristic

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	

Administrative Attributes

Admin. status: CURRENT ***Effective Date:*** 01/07/2003

Source organisation:

Source document:

Registration authority: National Health Information Group.

Steward:

Comments:

This data element is recommended for persons aged 18 years or older. It is recommended for use in population surveys when it is not possible to measure height.

It is recommended that in population surveys, sociodemographic data including ethnicity should be collected, as well as other risk factors including physiological status (e.g. pregnancy), physical activity, smoking and alcohol consumption. Summary statistics may need to be adjusted for these variables.

National health data elements currently exist for Sex, Date of birth, Country of birth, Indigenous status and smoking. Data elements are being developed for physical activity.

Presentation of data:

Means, 95% confidence intervals, medians and centiles should be reported to one decimal place. Where the sample permits, population estimates should be presented by sex and 5-year age groups. Estimates based on sample surveys may need to take into account sampling weights.

For consistency with conventional practice, and for current comparability with international data sets, recommended centiles are 5, 10, 15, 25, 50, 75, 85, 90 and 95. To estimate the 5th and 95th centiles, a sample size of at least 200 is recommended for each group for which the centiles are being specified.

For some reporting purposes, it may be desirable to present height data in categories. It is recommended that 5 cm groupings are used for this purpose. Height data should not be rounded before categorisation. The following categories may be appropriate for describing the heights of Australian men and women, although the range will depend on the population. The World Health Organization's range for height is 140–190 cm.

Ht < 140 cm

140 cm = Ht < 145 cm

145 cm = Ht < 150 cm

... in 5 cm categories

185 cm = Ht < 190 cm

Ht => 190 cm

On average, height tends to be overestimated when self-reported by respondents. Data for Australian men and women aged 20–69 years in 1989 indicated that men overestimated by an average of 1.1 cm (sem of 0.04 cm) and women by an average of 0.5 cm (sem of 0.05 cm) (Waters 1993). The extent of overestimation varied with age.

Indigenous status

Identifying and Definitional attributes

Knowledgebase ID: ***002009*** ***Version number:*** ***5***

Metadata type: Data element

Definition:	Indigenous status is a measure of whether a person identifies as being of Aboriginal or Torres Strait Islander origin. This is in accord with the first two of three components of the Commonwealth definition. See Comments for the Commonwealth definition.
Context:	Australia's Aboriginal and Torres Strait Islander peoples occupy a unique place in Australian society and culture. In the current climate of reconciliation, accurate and consistent statistics about Aboriginal and Torres Strait Islander peoples are needed in order to plan, promote and deliver essential services, to monitor changes in wellbeing and to account for government expenditure in this area. The purpose of this data element is to provide information about people who identify as being of Aboriginal or Torres Strait Islander origin. Agencies or establishments wishing to determine the eligibility of individuals for particular benefits, services or rights will need to make their own judgements about the suitability of the standard measure for these purposes, having regard to the specific eligibility criteria for the program concerned.

Relational and representational attributes

Data type:	Numeric	Maximum field size:	1
Representational class:	Code	Format:	N

Data domain:	1	Aboriginal but not Torres Strait Islander origin
	2	Torres Strait Islander but not Aboriginal origin
	3	Both Aboriginal and Torres Strait Islander origin
	4	Neither Aboriginal nor Torres Strait Islander origin
	9	Not stated/inadequately described

Guide for use:

This data element is based on the ABS Standard for Indigenous Status. For detailed advice on its use and application please refer to the ABS Website as indicated below under Source document.

The classification for 'Indigenous Status' has a hierarchical structure comprising two levels. There are four categories at the detailed level of the classification which are grouped into two categories at the broad level. There is one supplementary category for 'not stated' responses. The classification is as follows:

Indigenous:

- Aboriginal but not Torres Strait Islander origin
- Torres Strait Islander but not Aboriginal origin
- Both Aboriginal and Torres Strait Islander origin

Non-indigenous:

- Neither Aboriginal nor Torres Strait Islander Origin

Not stated/ inadequately described:
This category is not to be available as a valid answer to the questions but

is intended for use:

- primarily when importing data from other data collections that do not contain mappable data;
- where an answer was refused;
- where the question was not able to be asked prior to completion of assistance because the client was unable to communicate or a person who knows the client was not available.

Only in the last two situations may the tick boxes on the questionnaire be left blank.

Verification rules:

Collection methods: The standard question for Indigenous Status is as follows:

[Are you] [Is the person] [Is (name)] of Aboriginal or Torres Strait Islander origin?

(For persons of both Aboriginal and Torres Strait Islander origin, mark both 'Yes' boxes.)

No..... €

Yes, Aboriginal..... €

Yes, Torres Strait Islander..... €

This question is recommended for self-enumerated or interview-based collections. It can also be used in circumstances where a close relative, friend, or another member of the household is answering on behalf of the subject.

When someone is not present, the person answering for them should be in a position to do so, i.e. this person must know well the person about whom the question is being asked and feel confident to provide accurate information about them. However, it is strongly recommended that this question be asked directly wherever possible.

This question must always be asked regardless of data collectors' perceptions based on appearance or other factors.

The Indigenous status question allows for more than one response. The procedure for coding multiple responses is as follows:

If the respondent marks 'No' and either 'Aboriginal' or 'Torres Strait Islander', then the response should be coded to either Aboriginal or Torres Strait Islander

As indicated (i.e. disregard the 'No' response).

If the respondent marks both the 'Aboriginal' and 'Torres Strait Islander' boxes, then their response should be coded to 'Both Aboriginal and Torres Strait Islander Origin'.

If the respondent marks all three boxes ('No', 'Aboriginal' and 'Torres Strait Islander'), then the response should be coded to 'Both Aboriginal and Torres Strait Islander Origin' (i.e. disregard the 'No' response).

This approach may be problematical in some data collections, for example when data are collected by interview or using screen based data capture systems. An additional response category:

Yes, both Aboriginal and Torres Strait Islander… €

May be included if this better suits the data collection practices of the agency or establishment concerned.

Related metadata: Supersedes previous data element Indigenous status, version 4.

Information model link: NHIM Social characteristic

Data Set Specifications:		*Start date*	*End date*
NMDS –	Admitted patient care	01/07/2004	
NMDS –	Admitted patient mental health care	01/07/2004	
NMDS –	Perinatal	01/07/2004	
NMDS –	Community mental health care	01/07/2004	
NMDS –	Admitted patient palliative care	01/07/2004	
NMDS –	Alcohol and other drug treatment services	01/07/2004	
NMDS –	Non-admitted patient Emergency Department care	01/07/2004	
NMDS –	Residential mental health care	01/07/2004	
DSS –	Acute coronary syndrome (clinical)	04/06/2004	
DSS –	Cardiovascular disease (clinical)	02/09/2003	
DSS –	Diabetes (clinical)	02/09/2003	
DSS –	Health care client identification	02/09/2003	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 02/09/2003

Source organisation: Australian Bureau of Statistics.

Health Data Standards Committee.

National Community Services Data Committee.

Source document: The ABS standards for the collection of Indigenous status appear on the ABS website. <http://www.abs.gov.au/Ausstats/abs@.nsf/StatsLibrary>.

Select: Other ABS Statistical Standards/Standards for Social, Labour and Demographic Variables/Demographic Variables/Cultural Diversity Variables/Indigenous Status.

Registration authority: National Health Information Management Group.

National Community Services Information Management Group.

Steward:

Comments: This metadata item is common to both the *Health Data Dictionary* and the *National Community Services Data Dictionary National*.

The following definition, commonly known as 'The Commonwealth Definition', was given in a High Court judgement in the case of Commonwealth v Tasmania (1983) 46 ALR 625.

'An Aboriginal or Torres Strait Islander is a person of Aboriginal or Torres Strait Islander descent who identifies as an Aboriginal or Torres Strait Islander and is accepted as such by the community in which he or she lives'.

There are three components to the Commonwealth definition:

- descent;
- self-identification; and
- community acceptance.

In practice, it is not feasible to collect information on the community acceptance part of this definition in general purpose statistical and administrative collections and therefore standard questions on Indigenous status relate to descent and self-identification only.

Killip classification code

Identifying and Definitional attributes

Knowledgebase ID:	***001045***	***Version number:***	***1***
Metadata type:	Data element		

Definition:	Identifies the Killip class, as a measure of haemodynamic compromise, of the person at the time of presentation.
Context:	Health care and clinical settings.

Relational and representational attributes

Data type:	Numeric	***Maximum field size:***	1
Representational class:	Code	***Format:***	N

Data domain:	1	Class 1
	2	Class 2
	3	Class 3
	4	Class 4
	8	Other
	9	Not stated/inadequately described

Guide for use:

Code 1 Absence of crepitations/rales over the lung fields and absence of S3

Code 2 Crepitations/rales over 50% or less of the lung fields or the presence of an S3

Code 3 Crepitations/rales over more than 50% of the lung fields

Code 4 Cardiogenic Shock. Clinical criteria for cardiogenic shock are hypotension (a systolic blood pressure of less than 90 mmHg for at least 30 minutes or the need for supportive measures to maintain a systolic blood pressure of greater than or equal to 90 mmHg), end-organ hypoperfusion (cool extremities or a urine output of less than 30 ml/h, and a heart rate of greater than or equal to 60 beats per minute). The haemodynamic criteria are a cardiac index of no more than 2.2 l/min per square meter of body-surface area and a pulmonary-capillary wedge pressure of at least 15 mmHg.

For Acute Coronary Syndrome (ACS) reporting, to be determined at the time of presentation. The data element describes the objective evidence of haemodynamic compromise by clinical examination at the time of presentation. Rales or crepitations represent evidence of pulmonary interstitial oedema on lung auscultation and an S3 is an audible extra heart sound by cardiac auscultation.

Verification rules:

Collection methods: For Acute coronary syndrome (ACS) reporting, Killip classification at the time of presentation.

Related metadata: Is a qualifier of Acute coronary syndrome stratum, version 1.

Information model link: NHIM Physical wellbeing

Information framework link:

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status:	CURRENT	***Effective Date:***	04/06/2004
Source organisation:	Acute Coronary Syndrome Data Working Group.		
Source document:			
Registration authority:	National Health Information Group.		
Steward:	The National Heart Foundation of Australia. The Cardiac Society of Australia and New Zealand.		
Comments:			

Lipid-lowering therapy status

Identifying and Definitional attributes

Knowledgebase ID: ***001046*** ***Version number:*** ***1***

Metadata type: Data element

Definition:	Identifies the person's lipid lowering therapy status.
Context:	Health care and clinical settings.

Relational and representational attributes

Data type: Numeric ***Maximum field size:*** 2

Representational class: Code ***Format:*** NN

Data domain:	10	Given
	21	Not given – patient refusal
	22	Not given – true allergy to lipid lowering therapy
	23	Not given – previous myopathy
	24	Not given – hepatic dysfunction
	25	Not given — other
	90	Not stated/inadequately described

Guide for use: If recording 'Not given', record the principal reason if more than one code applies.

Verification rules:

Collection methods: For Acute coronary syndrome (ACS) reporting, can be collected at any time point during the management of the current event (i.e. at the time of triage, at times during the admission, or at the time of discharge).

Related metadata:

Information model link: NHIM Physical wellbeing

Information framework link:

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 04/06/2004

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Registration authority: National Health Information Group.

Steward: The National Heart Foundation of Australia.
The Cardiac Society of Australia and New Zealand.

Comments:

Mode of separation

Identifying and Definitional Attributes

Knowledgebase ID: ***000096*** ***Version number:*** ***3***

Metadata type: Data element

Definition:	Status at separation of person (discharge/transfer/death) and place to which person is released (where applicable).
Context:	Required for outcome analyses, for analyses of intersectoral patient flows and to assist in the continuity of care and classification of episodes into diagnosis related groups.

Relational and Representational Attributes

Data type: Numeric ***Maximum field size:*** 1

Representational class: Code ***Format:*** N

Data domain:

1	Discharge/transfer to an(other) acute hospital
2	Discharge/transfer to a nursing home
3	Discharge/transfer to an(other) psychiatric hospital
4	Discharge/transfer to other health care accommodation (includes mothercraft hospitals and hostels recognised by the Commonwealth Department of Health and Ageing, unless this is the usual place of residence)
5	Statistical discharge – type change
6	Left against medical advice/discharge at own risk
7	Statistical discharge from leave
8	Died
9	Other (includes discharge to usual residence, own accommodation or welfare institution (includes prisons, hostels and group homes providing primarily welfare services))

Guide for use: Code 4: In jurisdictions where mothercraft facilities are considered to be acute hospitals, patients separated to a mothercraft facility should have a mode of separation of code 1.

Verification rules:

Collection methods:

Related metadata: Is used in the derivation of Diagnosis related group, version 1.

Is supplemented by the data element Source of referral to acute hospital or private psychiatric hospital, version 3.

Is supplemented by the data element Source of referral to public psychiatric hospital, version 3.

Information model link: NHIM Exit/leave from service event

Data Set Specifications:		***Start date***	***End date***
NMDS –	Admitted patient care	01/07/2000	
NMDS –	Admitted patient mental health care	01/07/2000	
NMDS –	Admitted patient palliative care	01/07/2000	
DSS –	Acute coronary syndrome (clinical)	04/06/2004	

Administrative Attributes

Admin. status:	CURRENT	***Effective Date:***	01/07/2000
Source organisation:	National Health Data Committee		
Source document:			
Registration authority:	National Health Information Group.		
Steward:			
Comments:	The terminology of the modes relating to statistical separation have been modified to be consistent with the changes to data element Care type and other data elements related to admissions and separations.		

Myocardial infarction — history

Identifying and Definitional Attributes

Knowledgebase ID: ***000834*** ***Version number:*** ***1***

Metadata type: Data element

Definition:	Whether the individual has had a myocardial infarction.
Context:	Public health, health care and clinical settings.

Relational and Representational Attributes

Data type: Numeric ***Maximum field size:*** 1

Representational class: Code ***Format:*** N

Data domain:	1	Myocardial infarction – occurred in the last 12 months
	2	Myocardial infarction – occurred prior to the last 12 months
	3	Myocardial infarction – occurred both in and prior to the last 12 months
	4	No history of myocardial infarction
	9	Not stated/inadequately described

Guide for use:

Verification rules:

Collection methods: Ask the individual if he/she has had a myocardial infarction. If so determine whether it was within or prior to the last 12 months (or both). Record if evidenced by ECG changes or plasma enzyme changes.

Alternatively obtain this information from appropriate documentation.

Related metadata: Relates to the data element Blood pressure – diastolic measured, version 1.

Relates to the data element Blood pressure – systolic measured, version 1.

Relates to the data element Cholesterol-HDL – measured, version 1.

Relates to the data element Cholesterol-total – measured, version 1.

Relates to the data element Tobacco smoking status – diabetes mellitus, version 1.

Relates to the data element Triglycerides – measured, version 1.

Information model link: NHIM Physical wellbeing

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	
DSS –	Diabetes (clinical)	01/01/2003	

Administrative Attributes

Admin. status: CURRENT ***Effective Date:*** 01/01/2003

Source organisation: National Diabetes Data Working Group

Source document: National Diabetes Outcomes Quality Review Initiative (NDOQRIN) data dictionary.

Registration authority: National Health Information Group.

Steward:

Comments: Myocardial infarction (MI) generally occurs as a result of a critical imbalance between coronary blood supply and myocardial demand. Decrease in coronary blood flow is usually due to a thrombotic occlusion of a coronary artery previously narrowed by atherosclerosis. MI is one of the most common diagnoses in hospitalised patients in industrialised countries.

The most widely used in the detection of MI are creatinine kinase (CK) and (CK-MB), aspartate aminotransferase (AST) and lactate dehydrogenase (LD). Characteristic ECG changes include ST elevation, diminution of the R wave and a Q wave development. A recent study on Diabetes and Insulin-Glucose Infusion in Acute Myocardial Infarction (DIGAMI study) indicated that in diabetic patients with AMI, mortality is predicted by age, previous heart failure, and severity of the glycometabolic state at admission, but not by conventional risk factors or sex (American Heart Association 1999).

Reference:

Long-Term Results From the Diabetes and Insulin-Glucose Infusion in Acute Myocardial Infarction (DIGAMI) Study Circulation. 1999;99: 2626–2632.

Person identifier

Identifying and Definitional attributes

Knowledgebase ID: ***002020*** ***Version number:*** ***2***

Metadata type: Data element

Definition:	Person identifier unique within an establishment or agency.
Context:	This item could be used for editing at the agency, establishment or collection authority level and, potentially, for episode linkage. There is no intention that this item would be available beyond collection authority level.

Relational and representational attributes

Data type:	Alphanumeric	***Maximum field size:***	20
Representational class:	Identification number	***Format:***	AN(20)

Data domain:	Valid person identification number.

Guide for use: Individual agencies, establishments or collection authorities may use their own alphabetic, numeric or alphanumeric coding systems.

Verification rules: Field cannot be blank.

Collection methods:

Related metadata: Supersedes the previous data element Person identifier, version 1.
Relates to data element Establishment identifier, version 4.
Relates to data element Person identifier type — Health care, version 1.

Information model link: NHIM Recipient role

Data Set Specifications:		***Start date***	***End date***
NMDS —	Admitted patient care	01/07/2004	
NMDS —	Admitted patient mental health care	01/07/2004	
NMDS —	Perinatal	01/07/2004	
NMDS —	Community mental health care	01/07/2004	
NMDS —	Admitted patient palliative care	01/07/2004	
NMDS —	Alcohol and other drug treatment services	01/07/2004	
NMDS —	Non-admitted patient Emergency Department care	01/07/2004	
NMDS —	Residential mental health care	01/07/2004	
DSS —	Acute coronary syndrome (clinical)	04/06/2004	
DSS —	Cardiovascular disease (clinical)	02/09/2003	
DSS —	Health care client identification	02/09/2003	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 02/09/2003

Source organisation: Health Data Standards Committee.

National Community Services Data Committee.

Source document:

Registration authority: National Health Information Group.
National Community Services Information Management Group.

Steward:

Comments: This metadata item is common to both the *National Health Data Dictionary* and the *National Community Services Data Dictionary*.

Premature cardiovascular disease family history — status

Identifying and Definitional attributes

Knowledgebase ID: ***000659*** ***Version number:*** ***1***

Metadata type: Data element

Definition:	Identifies a person who has a first degree relative (father, mother or sibling) who has had a vascular event or condition diagnosed before the age of 60 years.
Context:	Public health, health care and clinical settings.

Relational and representational attributes

Data type: Numeric ***Maximum field size:*** 1

Representational class: Code ***Format:*** N

Data domain:	1	Yes
	2	No
	3	Family history status not known
	9	Not recorded

Guide for use:

Code 1: Yes, the person has a first-degree relative under the age of 60 years who has had a vascular disease/condition diagnosed.

Code 2: No, the person does not have a first-degree relative under the age of 60 years who has had a vascular disease/condition diagnosed.

Code 3: Family history status not known, the existence of a premature family history for cardiovascular disease cannot be determined.

Code 9: Not recorded, the information as to the existence of a premature family history for cardiovascular disease has not been recorded.

Verification rules:

Collection methods:

Related metadata:

Information model link: NHIM Physical wellbeing

Information framework link:

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	
DSS –	Cardiovascular disease (clinical)	01/01/2003	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 01/01/2003

Source organisation: CV-Data Working Group

Source document: Guidelines Subcommittee of the WHO-ISH: 1999 WHO-ISH guidelines for management of hypertension. J Hypertension 1999; 17: 151–83.

Registration authority: National Health Information Group.

Steward:

Comments:

DSS – Cardiovascular disease (clinical):

Having a family history of cardiovascular disease (CVD) is a risk factor for CVD and the risk increases if the event in the family member occurs at a young age. For vascular risk assessment a premature family history is considered to be present where a first-degree relative under age 60 years (woman or man) has had a vascular event/condition diagnosed. The evidence of family history being a strong risk factor for stroke only applies to certain limited stroke subtypes in certain populations.

Reason for readmission — Acute coronary syndrome

Identifying and Definitional attributes

Knowledgebase ID:	***001047***	***Version number:***	***1***
Metadata type:	Data element		

Definition:	Identifies the main reason for the admission, to any hospital, of a person within 28 days of discharge from an episode of admitted patient care for acute coronary syndrome.
Context:	Acute coronary syndrome reporting only.

Relational and representational attributes

Data type:	Numeric	***Maximum field size:***	2
Representational class:	Code	***Format:***	N(N)

Data domain:

Acute coronary syndrome:

1	ST elevation myocardial infarction
2	non-ST elevation ACS with high-risk features
3	non-ST elevation ACS with intermediate-risk features
4	non-ST elevation ACS with low-risk features
5	Planned Percutaneous Coronary Intervention (PCI)
6	Planned Coronary Artery Bypass Grafting (CABG)
7	Heart Failure (without MI)
8	Arrhythmia (without MI)
9	Conduction disturbance (without MI)
88	Non-cardiac cause
99	Not stated/inadequately described

Guide for use:

This data element is designed to identify recurrent admissions following an initial presentation with ACS, not necessarily to the hospital responsible for the index admission. The reason for readmission may be for cardiac or non-cardiac related causes.

Code 5 is coded when a readmission and PCI is planned, i.e. not precipitated by a recurrent ischaemic event. If a recurrent ischaemic event precipitates a readmission with an associated PCI undertaken, one of codes 1–4 should be coded.

Code 6 is coded when a readmission and CABG is planned, i.e. not precipitated by a recurrent ischaemic event. If a recurrent ischaemic event precipitates a readmission with an associated CABG undertaken, one of codes 1–4 should be coded.

Verification rules:

Collection methods:

Related metadata:

Is qualified by Acute coronary syndrome stratum, version 1.

Is qualified by the data element Concurrent clinical condition — on presentation, version 1.

Is used in conjunction with Heart rhythm type, version 1.

Is qualified by Separation date, version 5.

Is qualified by Date patient presents, version 2.

Information model link: NHIM Request for/entry into service event

Information framework link:

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 04/06/2004

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Registration authority: National Health Information Group.

Steward: The National Heart Foundation of Australia.
The Cardiac Society of Australia and New Zealand.

Comments:

Separation date

Identifying and Definitional attributes

Knowledgebase ID:	***000043***	***Version number:***	***5***
Metadata type:	Data element		

Definition:	Date on which an admitted patient completes an episode of care.
Context:	Required to identify the period in which an admitted patient hospital stay or episode occurred, and for derivation of length of stay.

Relational and representational attributes

Data type:	Numeric	***Maximum field size:***	8
Representational class:	Date	***Format:***	DDMMYYYY

Data domain:	Valid dates

Guide for use:

Verification rules: For the provision of State and Territory hospital data to Commonwealth agencies this field must:

- be <= last day of financial year
- be >= first day of financial year
- be >= Admission date.

Collection methods:

Related metadata: Supersedes previous data element Discharge date, version 4.
Is used in the calculation of Length of stay (including leave days), version 1.
Is used in the calculation of Length of stay (postnatal), version 1.

Information model link: NHIM Exit/leave from service event

Information framework link:

Data Set Specifications:		***Start date***	***End date***
NMDS –	Admitted patient care	01/07/1999	
NMDS –	Admitted patient mental health care	01/07/1999	
NMDS –	Admitted patient palliative care	01/07/1999	
NMDS –	Perinatal	01/07/1999	
DSS –	Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status:	CURRENT	***Effective Date:***	01/07/1999

Source organisation: National Health Data Committee

Source document:

Registration authority: National Health Information Group.

Steward:

Comments:

There may be variations amongst jurisdictions with respect to the recording of separation date. This most often occurs for patients who are statistically separated after a period of leave (and who do not return for further hospital care). In this case, some jurisdictions may record the separation date as the date of statistical separation (and record intervening days as leave days) while other jurisdictions may retrospectively separate patients on the first day of leave. Despite the variations in recording of separation date for this group of patients, the current practices provide for the accurate recording of length of stay.

Sex

Identifying and Definitional attributes

Knowledgebase ID: ***002024*** ***Version number:*** ***4***

Metadata type: Data element

Definition:	Sex is the biological distinction between male and female. Where there is an inconsistency between anatomical and chromosomal characteristics, sex is based on anatomical characteristics.
Context:	Sex is a core data element in a wide range of social, labour and demographic statistics.

Relational and representational attributes

Data type: Numeric ***Maximum field size:*** 1

Representational class: Code ***Format:*** N

Data domain:

1	Male
2	Female
3	Intersex or indeterminate
9	Not stated/inadequately described

Guide for use:

Code 3 Intersex or indeterminate, refers to a person, who because of a genetic condition, was born with reproductive organs or sex chromosomes that are not exclusively male or female or whose sex has not yet been determined for whatever reason.

Verification rules:

Code 3 should be confirmed if reported for people aged 90 days or greater.

Diagnosis and procedure codes should be checked against the national ICD-10-AM sex edits, unless the person is undergoing, or has undergone a sex change as detailed in collection methods or has a genetic condition resulting in a conflict between sex and ICD-10-AM code.

Collection methods:

Operationally, sex is the distinction between male and female, as reported by a person or as determined by an interviewer.

When collecting data on sex by personal interview, asking the sex of the respondent is usually unnecessary and may be inappropriate, or even offensive. It is usually a simple matter to infer the sex of the respondent through observation, or from other cues such as the relationship of the person(s) accompanying the respondent, or first name. The interviewer may ask whether persons not present at the interview are male or female.

A person's sex may change during their lifetime as a result of procedures known alternatively as Sex change, Gender reassignment, Transsexual surgery, Transgender reassignment or Sexual reassignment. Throughout this process, which may be over a considerable period of time, sex could be recorded as either Male or Female.

In data collections that use the ICD-10-AM classification, where sex change is the reason for admission, diagnoses should include the appropriate ICD-10-AM code(s) that clearly identify that the person is undergoing such a process. This code(s) would also be applicable after the person has completed such a process, if they have a procedure involving an organ(s) specific to their previous sex (e.g. where the patient has prostate or ovarian cancer).

Code 3 Intersex or indeterminate, is normally used for babies for whom sex has not been determined for whatever reason; should not generally be used on data collection forms completed by the respondent; and should only be used if the person or respondent volunteers that the person is intersex or where it otherwise becomes clear during the collection process that the individual is neither male nor female.

Code 9 is not to be used on primary collection forms. It is primarily for use in administrative collections when transferring data from data sets where the item has not been collected.

Related metadata: Supersedes previous data element Sex, version 3.

Is used in the derivation of Diagnosis related group, version 1.

Information model link: NHIM Demographic characteristic

Data Set Specifications:		***Start date***	***End date***
NMDS –	Admitted patient care	01/07/2004	
NMDS –	Admitted patient mental health care	01/07/2004	
NMDS –	Perinatal	01/07/2004	
NMDS –	Community mental health care	01/07/2004	
NMDS –	Admitted patient palliative care	01/07/2004	
NMDS –	Alcohol and other drug treatment services	01/07/2004	
NMDS –	Non-admitted patient emergency department care	01/07/2004	
NMDS –	Residential mental health care	01/07/2004	
DSS –	Acute coronary syndrome (clinical)	04/06/2004	
DSS –	Cardiovascular disease (clinical)	02/09/2003	
DSS –	Diabetes (clinical)	02/09/2003	
DSS –	Health care client identification	02/09/2003	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 02/09/2003

Source organisation: Australian Bureau of Statistics.

Source document: The ABS standards for the collection of Sex appear on the ABS website. Reference:

<http://www.abs.gov.au/Ausstats/abs@.nsf/StatsLibrary>.

Select: Other ABS Statistical Standards/Standards for Social, Labour and Demographic Variables/Demographic Variables/Sex.

Registration authority: National Health Information Group.

National Community Services Information Management Group.

Steward:

Comments: This metadata item is common to both the *National Health Data Dictionary* and the *National Community Services Data Dictionary*.

The definition for Intersex in Guide for use is sourced from the ACT Legislation (Gay, Lesbian and Transgender) Amendment Act 2003.

DSS - Diabetes (clinical):

Referring to the National Diabetes Register Statistical profile (December 2000), the sex ratio varied with age. For ages less than 25 years, numbers of

males and females were similar. At ages 25-44 years, females strongly outnumbered males, reflecting the effect of gestational diabetes in women from this group. For older age groups (45-74 years), males strongly outnumber females and in the group of 75 and over, the ratio of males to females was reversed, with a substantially lower proportion of males in the population in this age group due to the higher female life expectancy. (AIHW National Mortality Database 1997/98; National Diabetes Register; Statistical Profile, December 2000).

Time creatine kinase MB isoenzyme (CK-MB) measured

Identifying and Definitional attributes

Knowledgebase ID:	***001048***	***Version number:***	***1***
Metadata type:	Data element		

Definition:	The time at which the creatine kinase MB isoenzyme (CK-MB) was measured.
Context:	Health care and clinical settings.

Relational and representational attributes

Data type:	Numeric	***Maximum field size:***	4
Representational class:	Time	***Format:***	HHMM

Data domain:	Time in 24-hour clock format.

Guide for use:

Verification rules:

Collection methods:

Related metadata: Is used in conjunction with Creatine kinase MB isoenzyme (CK-MB) — measured, version 1.

Is used in conjunction with Date Creatine kinase MB isoenzyme (CK-MB) measured, version 1.

Information model link: NHIM Service provision event

Information framework link:

Data Set Specifications:	***Start date***	***End date***
DSS – Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status:	CURRENT	***Effective Date:***	04/06/2004

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Registration authority: National Health Information Group.

Steward: The National Heart Foundation of Australia.

The Cardiac Society of Australia and New Zealand.

Comments:

Time of first angioplasty balloon inflation or stenting

Identifying and Definitional attributes

Knowledgebase ID:	***001049***	***Version number:***	***1***
Metadata type:	Data element		

Definition:	The time of the first angioplasty balloon inflation or stent placement.
Context:	Health care and clinical settings.

Relational and representational attributes

Data type:	Numeric	***Maximum field size:***	4
Representational class:	Time	***Format:***	HHMM

Data domain:	Time in 24-hour clock format.

Guide for use: For Acute coronary syndrome (ACS) reporting, refers to coronary arteries.

Verification rules:

Collection methods:

Related metadata: Is used in conjunction with Date of first angioplasty balloon inflation or stenting, version 1.

Is used in conjunction with Date of triage, version 1.

Is used in conjunction with Time of triage, version 1.

Is used in conjunction with the data element Acute coronary syndrome procedure type, version 1.

Information model link: NHIM Service provision event

Information framework link:

Data Set Specifications:	***Start date***	***End date***
DSS – Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status:	CURRENT	***Effective Date:***	04/06/2004

Registration authority: National Health Information Group.

Steward: The National Heart Foundation of Australia.

The Cardiac Society of Australia and New Zealand.

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Comments:

Time of intravenous fibrinolytic therapy

Identifying and Definitional attributes

Knowledgebase ID:	***001050***	***Version number:***	***1***
Metadata type:	Data element		

Definition:	The time intravenous (IV) fibrinolytic therapy was first administered.
Context:	Health care and clinical settings.

Relational and representational attributes

Data type:	Numeric	***Maximum field size:***	4
Representational class:	Time	***Format:***	HHMM

Data domain:	Time in 24-hour clock format. 9999 Not stated/inadequately described

Guide for use: For Acute coronary syndrome (ACS) reporting, refers to coronary arteries. If initiated by a bolus dose whether in a pre-hospital setting, emergency department or inpatient unit/ward, the time the initial bolus was administered should be reported.

Verification rules:

Collection methods:

Related metadata: Is used in conjunction with Fibrinolytic therapy status, version 1.

Is used in conjunction with Date of intravenous fibrinolytic therapy, version 1.

Is used in conjunction with Fibrinolytic drug used, version 1.

Is used in conjunction with Date of triage, version 1.

Is used in conjunction with Time of triage, version 1.

Information model link: NHIM Service provision event

Information framework link:

Data Set Specifications:	***Start date***	***End date***
DSS – Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status:	CURRENT	***Effective Date:***	04/06/2004

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Registration authority: National Health Information Group.

Steward: The National Heart Foundation of Australia.

The Cardiac Society of Australia and New Zealand.

Comments:

Time of triage

Identifying and Definitional attributes

Knowledgebase ID:	***000354***	***Version number:***	***1***
Metadata type:	Data element		

Definition:	The time at which the patient is triaged.
Context:	Admitted patient care: Required to identify the commencement of the service and calculation of waiting times.

Relational and representational attributes

Data type:	Numeric	***Maximum field size:***	4
Representational class:	Time	***Format:***	HHMM

Data domain:	Valid time in 24-hour clock format.

Guide for use: 24-hour clock format.

Verification rules:

Collection methods:

Related metadata:

Relates to the data element Admission date, version 4.

Relates to the data element Admission time, version 2.

Relates to the data element Date of service event, version 1.

Relates to the data element Date of triage, version 1.

Relates to the data element Date patient presents, version 2.

Relates to the data element Emergency department waiting time to admission, version 1.

Relates to the data element Emergency department waiting time to service delivery, version 2.

Relates to the data element concept Patient presentation at emergency department, version 1.

Relates to the data element Time of commencement of service event, version 2.

Relates to the data element Time patient presents, version 2.

Relates to the data element Triage category, version 1.

Relates to the data element Type of visit to emergency department, version 2.

Information model link: NHIM Assessment event

Information framework link:

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 01/07/1998

Source organisation: National Institution Based Ambulatory Model Reference Group.
National Health Data Committee.

Source document:

Registration authority: National Health Information Group.

Steward:

Comments:

Time patient presents

Identifying and Definitional attributes

Knowledgebase ID:	***000351***	***Version number:***	***2***
Metadata type:	Data element		

Definition:	The time at which the patient presents for the delivery of a service.
Context:	Admitted patient care. Community health care. Hospital non-admitted patient care: Required to identify commencement of a visit and for calculation of waiting times.

Relational and representational attributes

Data type:	Numeric	***Maximum field size:***	4
Representational class:	Time	***Format:***	HHMM

Data domain:	Time in 24-hour clock format.

Guide for use:

For community health care, outreach services and services provided via telephone or telehealth, this may be the time at which the service provider presents to the patient or the telephone/telehealth session commences.

The time of patient presentation at the emergency department is the earliest occasion of being registered clerically or triaged.

The time that the patient presents is not necessarily:

- the listing time for care (see Listing date for care data element concept for an analogous concept), nor
- the time at which care is scheduled to be provided, nor

the time at which commencement of care actually occurs (for admitted patients see Admission time, for hospital non-admitted patient care and community health care see Time of commencement of service event).

Verification rules:

Collection methods:

Related metadata:

Relates to the data element Admission time, version 2.

Relates to the data element Date of triage, version 1.

Relates to the data element Date patient presents, version 2.

Relates to the data element Emergency department waiting time to admission, version 1.

Relates to the data element Emergency department waiting time to service delivery, version 2.

Relates to the data element concept Patient presentation at emergency department, version 1.

Relates to the data element Time of triage, version 1.

Supersedes previous data element Time patient presents, version 1.

Relates to the data element Triage category, version 1.

Information model link: NHIM Request for/entry into service event

Information framework link:

Data Set Specifications:		***Start date***	***End date***
NMDS –	Non-admitted patient emergency department care	01/07/2003	
DSS –	Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 01/07/2001

Source organisation: National Institution Based Ambulatory Model Reference Group
National Health Data Committee

Source document:

Registration authority: National Health Information Group.

Steward:

Comments:

Time troponin measured

Identifying and Definitional attributes

Knowledgebase ID:	***001051***	***Version number:***	***1***
Metadata type:	Data element		

Definition:	The time at which the troponin (T or I) was measured.
Context:	Health care and clinical settings.

Relational and representational attributes

Data type:	Numeric	***Maximum field size:***	4
Representational class:	Time	***Format:***	HHMM

Data domain:	Time in 24-hour clock format.

Guide for use: This data element pertains to the measuring of troponin at any time point during this current event.

Verification rules:

Collection methods:

Related metadata: Is used in conjunction with Date troponin measured, version 1.
Is used in conjunction with Troponin measured, version 1.

Information model link: NHIM Service provision event

Information framework link:

Data Set Specifications:	***Start date***	***End date***
DSS – Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status:	CURRENT	***Effective Date:***	04/06/2004

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Registration authority: National Health Information Group.

Steward: The National Heart Foundation of Australia.
The Cardiac Society of Australia and New Zealand.

Comments:

Tobacco smoking status

Identifying and Definitional attributes

Knowledgebase ID: ***000410*** ***Version number:*** ***1***

Metadata type: Data element

Definition: A person's current and past smoking behaviour.

Context: Public health, health care and clinical settings:

Smoker type is used to define sub-populations of adults (age 18 years and over) based on their smoking behaviour. Smoking has long been known as a health risk factor. Population studies indicate a relationship between smoking and increased mortality/morbidity. This data element can be used to estimate smoking prevalence.

Other uses are to:

- evaluate health promotion and disease prevention programs (assessment of interventions)
- monitor health risk factors and progress towards National Health Goals and Targets

Relational and representational attributes

Data type: Numeric ***Maximum field size:*** 1

Representational class: Code ***Format:*** N

Data domain:

1	Daily smoker
2	Weekly smoker
3	Irregular smoker
4	Ex-smoker
5	Never smoked

Guide for use: The above grouping subdivides a population into five mutually exclusive categories.

- Daily smoker: A person who smokes daily
- Weekly smoker: A person who smokes at least weekly but not daily
- Irregular smoker: A person who smokes less than weekly
- Ex-smoker: A person who does not smoke at all now, but has smoked at least 100 cigarettes or a similar amount of other tobacco products in his/her lifetime.
- Never-smoker: A person who does not smoke now and has smoked fewer than 100 cigarettes or similar amount of other tobacco products in his/her lifetime.

Verification rules:

Collection methods: The recommended standard for collecting this information is the Standard Questions on the Use of Tobacco Among Adults – interviewer administered (Questions 1 and 4) and self-administered (Questions 1 and 1a) versions. The questionnaires are designed to cover persons aged 18.

Related metadata: Is qualified by Date of birth, version 4.

Relates to the data element Behaviour-related risk factor intervention, version 1.

Relates to the data element Behaviour-related risk factor intervention – purpose, version 1.

Information model link: NHIM Lifestyle characteristic

Information framework link:

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	
DSS –	– Cardiovascular disease (clinical)	01/01/2003	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 01/07/1999

Source organisation: Australian Institute of Health and Welfare.

Source document: Standard Questions on the Use of Tobacco Among Adults (1998).

Registration authority: National Health Information Group.

Steward:

Comments: There are two other ways of categorising this information:

- Regular and irregular smokers where a regular smoker includes someone who is a daily smoker or a weekly smoker. 'Regular' smokers is the preferred category to be reported in prevalence estimates.
- Daily and occasional smokers where an occasional smoker includes someone who is a weekly or irregular smoker. The category of 'occasional' smoker can be used when the aim of the study is to draw contrast between daily smokers and other smokers. Where this information is collected by survey and the sample permits, population estimates should be presented by sex and 5-year age groups. Summary statistics may need to be adjusted for age and other relevant variables.

It is recommended that in surveys of smoking, data on age, sex and other socio-demographic variables should be collected. It is also recommended that when smoking is investigated in relation to health, data on other risk factors including pregnancy status, physical activity, overweight and obesity, and alcohol consumption should be collected.

The Standard Questions on the Use of Tobacco Among Adults Available etc. are available from the National Centre for Monitoring Cardiovascular Disease at the AIHW, telephone (02) 6244 1000.

Triage category

Identifying and Definitional attributes

Knowledgebase ID:	***000355***	***Version number:***	***1***
Metadata type:	Data element		

Definition:	The urgency of the patient's need for medical and nursing care.
Context:	Emergency department care: Required to provide data for analysis of emergency department processes.

Relational and representational attributes

Data type:	Numeric	***Maximum field size:***	1
Representational class:	Code	***Format:***	N

Data domain:	1	Resuscitation: immediate (within seconds)
	2	Emergency: within 10 minutes
	3	Urgent: within 30 minutes
	4	Semi-urgent: within 60 minutes
	5	Non-urgent: within 120 minutes

Guide for use:

Verification rules:

Collection methods:

This triage classification is to be used in the emergency departments of hospitals. Patients will be triaged into one of five categories on the National Triage Scale according to the triageur's response to the question: 'This patient should wait for medical care no longer than ...?'.

The triage category is allocated by an experienced registered nurse or medical practitioner. If the triage category changes, record the more urgent category.

Related metadata:

Relates to the data element Admission date, version 4.

Relates to the data element Admission time, version 2.

Relates to the data element Date of service event, version 1.

Relates to the data element Date of triage, version 1.

Relates to the data element Date patient presents, version 2.

Relates to the data element Emergency department departure status, version 2.

Relates to the data element Emergency department waiting time to admission, version 1.

Relates to the data element Emergency department waiting time to service delivery, version 2.

Relates to the data element Non-admitted patient, version 1.

Relates to the data element concept Patient presentation at emergency department, version 1.

Relates to the data element Time of commencement of service event, version 2.

Relates to the data element Time of triage, version 1.

Relates to the data element Time patient presents, version 2.

Relates to the data element Type of visit to emergency department, version 2.

Information model link: NHIM Assessment event

Information framework link:

Data Set Specifications:		***Start date***	***End date***
NMDS –	Non-admitted patient emergency department care	01/07/2003	
DSS –	Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 01/07/1998

Source organisation:

Source document: National Triage Scale, Australasian College for Emergency Medicine

Registration authority: National Health Information Group.

Steward:

Comments:

Triglycerides — measured

Identifying and Definitional attributes

Knowledgebase ID:	***000658***	***Version number:***	***1***
Metadata type:	Data element		

Definition:	A person's measured triglycerides.
Context:	Public health, health care and clinical setting.

Relational and representational attributes

Data type:	Numeric	***Maximum field size:***	4
Representational class:	Quantitative value	***Format:***	NN.N

Data domain:	Measurement in mmol/L to 1 decimal place 99.9 Not stated/inadequately described

Guide for use: Record the absolute result of the total triglyceride measurement.

Verification rules:

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.

Note that to calculate the low-density lipoprotein – cholesterol (LDL-C) from the Friedwald Equation (Friedwald et al. 1972):

- a fasting level of plasma triglyceride and knowledge of the levels of plasma total cholesterol and high-density lipoprotein – cholesterol (HDL-C) is required
- the Friedwald equation becomes unreliable when the plasma triglyceride exceeds 4.5 mmol/L and
- that while levels are reliable for the first 24 hours after the onset of acute coronary syndromes, they may be unreliable for the subsequent 6 weeks after an event.

(Lipid Management Guidelines – 2001, MJA 2001; 175: S57–S88. National Heart Foundation of Australia and the Cardiac Society of Australia and New Zealand.)

Related metadata: Relates to the data element Cholesterol-total – measured, 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 Dyslipidaemia – treatment, version 1.
Is used in conjunction with Fasting status, version 1.
Is used in conjunction with Service contact date, version 1.
Relates to the data element Waist circumference – measured, version 2.

Information model link: NHIM Assessment event

Information framework link:

Data Set Specifications:		*Start date*	*End date*
DSS –	Acute coronary syndrome (clinical)	04/06/2004	
DSS –	Cardiovascular disease (clinical)	01/01/2003	
DSS –	Diabetes (clinical)	01/01/2003	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 01/01/2003

Source organisation: CV-Data Working Group.

Source document:

Registration authority: National Health Information Group.

Steward:

Comments: DSS – Cardiovascular disease (clinical):

A relationship between triglyceride and HDL-C and chronic heart disease (CHD) event rates has been shown. This view is supported by the observation that the remnants of triglyceride-rich lipoproteins are the particles that occur in dysbetalipoproteinaemia, a condition associated with a very high risk of premature atherosclerotic vascular disease. There have been two comprehensive reviews of the relationship between plasma triglyceride and CHD (see Criqui et al. 1993 and Austin et al. 1991). Criqui concludes that triglyceride is not an independent predictor of CHD and is probably not causally related to the disease, while Austin provides a compelling case for a causal role of (at least) some triglyceride-rich lipoproteins. Conclusions drawn from population studies of the relationship between plasma triglyceride and the risk of CHD include the following:

- an elevated concentration of plasma triglyceride (> 2.0 mmol/L) is predictive of CHD when associated with either an increased concentration of LDL-C or a decreased concentration of HDL-C
- the relationship between CHD risk and plasma triglyceride is not continuous, with evidence that the risk is greatest in people with triglyceride levels between 2 and 6 mmol/L. (Lipid Management Guidelines – 2001, MJA 2001; 175: S57–S88. National Heart Foundation of Australia and the Cardiac Society of Australia and New Zealand.)

It is likely that the positive relationship between plasma triglyceride and CHD, as observed in many population studies, is because an elevated level of plasma triglyceride in some people is a reflection of an accumulation of the atherogenic remnants of chylomicrons and very low density lipoprotein. These particles are rich in both triglyceride and cholesterol and appear to be at least as atherogenic as LDL.

DSS – Diabetes (clinical):

Following Principles of Care and Guidelines for the Clinical Management of Diabetes Mellitus, the targets for lipids management is :

- to reduce total cholesterol to less than 5.5 mmol/L
- to reduce triglyceride level to less than 2.0 mmol/L
- to increase HDL-C to more than or equal to 1.0 mmol/L.

Alterations in fat transport, often resulting in hyper-triglyceridaemia, are well-recognised concomitants of diabetes mellitus.

Elevated plasma triglyceride levels are present in about one third of diabetic patients. It seems that triglycerides are related to the critical role

of insulin in the production and removal from plasma of triglyceride-rich lipoproteins.

Lifestyle modifications, including weight loss and reduction of excess alcohol intake, are particularly effective for reducing triglyceride and increasing HDL-C.

References:

National Heart Foundation of Australia – Lipid Management Guidelines 2001.

Hypertriglyceridaemia; Australian Medicines Handbook.

Troponin assay type

Identifying and Definitional attributes

Knowledgebase ID:	***001052***	***Version number:***	***1***
Metadata type:	Data element		

Definition:	Identifies the type of troponin assay (I or T) used to assess the person's troponin levels.
Context:	Health care and clinical settings.

Relational and representational attributes

Data type:	Numeric	***Maximum field size:***	1
Representational class:	Code	***Format:***	N

Data domain:	1	Cardiac troponin T (cTnT)
	2	Cardiac troponin I (cTnI)
	8	Not taken
	9	Not stated/inadequately described

Guide for use: For Acute coronary syndrome (ACS) reporting, identifies the type of troponin assay (I or T) used to assess troponin levels during this presentation.

Verification rules:

Collection methods:

Related metadata: Is used in conjunction with Troponin measured, version 1.

Is used in conjunction with Troponin assay — upper limit of normal range, version 1.

Is used in conjunction with Time troponin measured, version 1.

Is used in conjunction with Date troponin measured, version 1.

Information model link: NHIM Service provision event

Information framework link:

Data Set Specifications:		***Start date***	***End date***
DSS —	Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status:	CURRENT	***Effective Date:***	04/06/2004

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Registration authority: National Health Information Group.

Steward: The National Heart Foundation of Australia.

The Cardiac Society of Australia and New Zealand.

Comments:

Troponin assay — upper limit of normal range

Identifying and Definitional attributes

Knowledgebase ID: ***001053*** ***Version number:*** ***1***

Metadata type: Data element

Definition:	Laboratory standard for the value of 'troponin T' or 'troponin I' that is the upper boundary of the normal reference range.
Context:	Health care and clinical settings.

Relational and representational attributes

Data type: Numeric ***Maximum field size:*** 4

Representational class: Quantitative value ***Format:*** NNNN

Data domain:	µg/L upper limit value that is constant for the laboratory performing the test, 9999 Not stated/Inadequately described.

Guide for use: Record the upper limit of normal (usually the ninety-ninth percentile of a normal population) for the individual laboratory.

Verification rules:

Collection methods:

Related metadata: Is used in conjunction with Troponin measured, version 1

Is used in conjunction with Troponin — assay type, version 1.

Is used in conjunction with Time troponin measured, version 1.

Is used in conjunction with Date troponin measured, version 1.

Information model link: NHIM Service provision event

Information framework link:

Data Set Specifications:	***Start date***	***End date***
DSS — Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 04/06/2004

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Registration authority: National Health Information Group.

Steward: The National Heart Foundation of Australia.

The Cardiac Society of Australia and New Zealand.

Comments:

Troponin measured

Identifying and Definitional attributes

Knowledgebase ID: ***001054*** ***Version number:*** ***1***

Metadata type: Data element

Definition:	A person's measured troponin.
Context:	Health care and clinical settings.

Relational and representational attributes

Data type: Numeric ***Maximum field size:*** 5

Representational class: Quantitative value ***Format:*** NN.NN

Data domain:	Troponin measured in µg/L, or 8888 Not measured 9999 Not stated/ inadequately defined

Guide for use: Code 8888 if test for troponin (T or I) was not done.

Measured in different assays dependant upon laboratory methodology.

When only one Troponin level is recorded, this should be the peak level during the admission.

For Acute coronary syndrome (ACS) reporting, can be used to determine diagnostic strata.

Verification rules:

Collection methods:

Related metadata: Is a qualifier of Acute coronary syndrome stratum, version 1.

Is used in conjunction with Date troponin measured, version 1.

Is used in conjunction with Time troponin measured, version 1.

Is used in conjunction with Troponin – assay type, version 1.

Is used in conjunction with Troponin assay – upper level of normal range, version 1.

Information model link: NHIM Service provision event

Information framework link:

Data Set Specifications:	***Start date***	***End date***
DSS – Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 04/06/2004

Source organisation: Acute Coronary Syndrome Data Working Group.

Source document:

Registration authority: National Health Information Group

Steward: The National Heart Foundation of Australia.
The Cardiac Society of Australia and New Zealand.

Comments:

Type of visit to emergency department

Identifying and Definitional attributes

Knowledgebase ID:	***000352***	***Version number:***	**2**
Metadata type:	Data element		

Definition:	The reason the patient presents to the emergency department.
Context:	Hospital non-admitted patient care: Required for analysis of emergency department services.

Relational and representational attributes

Data type:	Numeric	***Maximum field size:***	1
Representational class:	Code	***Format:***	N

Data domain:	1	Emergency presentation: attendance for an actual or suspected condition which is sufficiently serious to require acute unscheduled care.
	2	Return visit, planned: presentation is planned and is a result of a previous emergency department presentation or return visit.
	3	Pre-arranged admission: a patient who presents at the emergency department for either clerical, nursing or medical processes to be undertaken, and admission has been pre-arranged by the referring medical officer and a bed allocated.
	4	Patient in transit: the emergency department is responsible for care and treatment of a patient awaiting transport to another facility.
	5	Dead on arrival: a patient who is dead on arrival at the emergency department.

Guide for use:

Verification rules:

Collection methods:

Related metadata: Relates to the data element Emergency department waiting time to admission version 1.

Relates to the data element Emergency department waiting time to service delivery, version 2.

Relates to the data element concept Patient presentation at emergency department, version 1.

Relates to the data element Triage category, version 1.

Supersedes previous data element Type of visit, version 1.

Information model link: NHIM Request for/entry into service event

Information framework link:

Data Set Specifications:		***Start date***	***End date***
NMDS –	Non-admitted patient emergency department care	01/07/2003	
DSS –	Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 01/07/2001

Source organisation: National Institution Based Ambulatory Model Reference Group.
National Health Data Committee.

Source document:

Registration authority: National Health Information Group.

Steward:

Comments:

Vascular history

Identifying and Definitional attributes

Knowledgebase ID:	***000676***	***Version number:***	***1***
Metadata type:	Data element		

Definition:	Describes the vascular history of the person.
Context:	Public health, health care and clinical settings: The vascular history of the patient is important as an element in defining future risk for a cardiovascular event and as a factor in determining best practice management for various cardiovascular risk factor(s). It may be used to map vascular conditions, assist in risk stratification and link to best practice management.

Relational and representational attributes

Data type:	Numeric	***Maximum field size:***	2
Representational class:	Code	***Format:***	NN

Data domain:	01	Myocardial infarction
	02	Unstable angina pectoris
	03	Angina
	04	Heart failure
	05	Atrial fibrillation
	06	Other dysrhythmia or conductive disorder
	07	Rheumatic heart disease
	08	Non-rheumatic valvular heart disease
	09	Left ventricular hypertrophy
	10	Stroke
	11	Transient ischaemic attack
	12	Hypertension
	13	Peripheral vascular disease (includes abdominal aortic aneurism)
	14	Deep vein thrombosis
	15	Other atherosclerotic disease
	16	Carotid stenosis
	17	Vascular renal disease
	18	Vascular retinopathy (hypertensive)
	19	Vascular retinopathy (diabetic)
	97	Other vascular
	98	No vascular history
	99	Unknown/not stated/not specified

Guide for use:	More than one code can be recorded.
Verification rules:	
Collection methods:	Ideally, vascular history information is derived from and substantiated by clinical documentation.

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

Information model link: NHIM Physical wellbeing

Information framework link:

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	
DSS –	– Cardiovascular disease (clinical)	01/01/2003	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 01/01/2003

Source organisation: CV-Data Working Group
National Centre for Classification in Health
National Data Standards for Injury Surveillance Advisory Group

Source document: International Classification of Diseases – Tenth Revision – Australian Modification (3rd edition 2002), National Centre for Classification in Health, Sydney.

Registration authority: National Health Information Group.

Steward:

Comments: Further work needs to be undertaken to ensure that the values in the data domain can be mapped to the current version of ICD-10-AM.

Weight — self reported

Identifying and Definitional attributes

Knowledgebase ID:	***000366***	***Version number:***	***2***
Metadata type:	Data element		

Definition:	A person's self-reported weight (body mass).
Context:	Public health and health care: Weight is an overall measure of body size that does not distinguish between fat and muscle. Weight is an indicator of nutrition status and health status. Low pre-pregnancy weight is an indicator of poorer gestational outcome in women (Kramer 1988). Low weight is also associated with osteoporosis. In general, change in weight is of interest in adults because it is an indicator of changing health status. Self reported or parentally reported weight for children and adolescents should be used cautiously if at all. It enables the calculation of body mass index which requires the measurement of height and weight (body mass) for adults.

Relational and representational attributes

Data type:	Numeric	***Maximum field size:***	3
Representational class:	Quantitative value	***Format:***	NNN

Data domain:	Recorded in kilograms. 888 Unknown 999 Not stated

Guide for use:

Verification rules:

Collection methods:

The method of data collection, e.g. face to face interview, telephone interview or self-completion questionnaire, can affect survey estimates and should be reported.

The data collection form should include a question asking the respondent what their weight is. For example, the Australian Bureau of Statistics National Health Survey 1989–90 included the question 'How much do you weigh without clothes and shoes?'. The data collection form should allow for both metric (to the nearest 1 kg) and imperial (to the nearest 1 lb) units to be recorded.

If practical, it is preferable to enter the raw data into the data base before conversion of measures in imperial units to metric. However, if this is not possible, weight reported in imperial units can be converted to metric prior to data entry using a conversion factor of 0.454 kg to the lb.

Rounding to the nearest 1 kg will be required for measures converted to metric prior to data entry, and may be required for data reported in metric units to a greater level of precision than the nearest 1 kg. The following rounding conventions are desirable to reduce systematic over reporting (Armitage & Berry 1994):

nnn.x where x < 5 – round down, e.g. 72.2 kg would be rounded to 72 kg.

nnn.x where x > 5 – round up, e.g. 72.7 kg would be rounded to 73 kg.

nnn.x where x = 5 – round to the nearest even number, e.g. 72.5 kg would be rounded to 72 kg, while 73.5 kg would be rounded to 74 kg.

Related metadata: Supersedes previous data element Adult weight – self-reported, version 1.
Is used in the calculation of Body mass index, version 2.

Information model link: NHIM Physical characteristic

Information framework link:

Data Set Specifications:		***Start date***	***End date***
DSS –	Acute coronary syndrome (clinical)	04/06/2004	

Administrative attributes

Admin status: CURRENT ***Effective Date:*** 01/01/2003

Source organisation: National Health Data Committee.
National Centre for Monitoring Cardiovascular Disease.
Australian Institute of Health and Welfare.

Source document:

Registration authority: National Health Information Group.

Steward:

Comments: This data element is recommended for persons aged 18 years or older. It is recommended for use in population surveys when it is not possible to measure weight.

It is recommended that in population surveys, sociodemographic data including ethnicity should be collected, as well as other risk factors including physiological status (e.g. pregnancy), physical activity, smoking and alcohol consumption. Summary statistics may need to be adjusted for these variables.

National health data elements currently exist for Sex, Date of birth, Country of birth, Indigenous status and smoking. Data elements are being developed for physical activity.

Presentation of data:

Means and 95% confidence intervals, medians and centiles should be reported to one decimal place. Where the sample permits, population estimates should be presented by sex and 5-year age groups. Estimates based on sample surveys may need to take into account sampling weights.

For consistency with conventional practice, and for current comparability with international data sets, recommended centiles are 5, 10, 15, 25, 50, 75, 85, 90 and 95. To estimate the 5th and 95th centiles, a sample size of at least 200 is recommended for each group for which the centiles are being specified.

For some reporting purposes, it may be desirable to present weight data in categories. It is recommended that 5 kg groupings are used for this purpose. Weight data should not be rounded before categorisation. The following categories may be appropriate for describing the weights of Australian men and women, although the range will depend on the population. The World Health Organization's range for weight is 30–140 kg.

Wt < 30 kg
30 kg = Wt < 35 kg
35 kg = Wt < 40 kg
... in 5 kg categories
135 kg = Wt < 140 kg
Wt = >140 kg

On average, body mass (weight) tends to be underestimated when self-reported by respondents. Data for men and women aged 20–69 years in 1989 indicated that men underestimated by an average of 0.2 kg (sem of 0.05 kg) and women by an average of 0.4 kg (sem of 0.04 kg) (Waters 1993). The extent of underestimation varied with age.