Acute coronary syndrome (clinical) NBPDS 2013-

Identifying and definitional attributes

Metadata item type: Data Set Specification

METEOR identifier: 523140

Registration status:
- Health, Standard 02/05/2013

DSS type: Data Set Specification (DSS)

Scope:

The Acute coronary syndrome (ACS) National best practice data set (NBPDS) is not mandated for collection but is recommended as best practice if ACS data are to be collected. This data set enables individual hospitals or health service areas to develop collection methods and policies appropriate for their service.

The scope for the ACS NBPDS is to collect data on the period between when a person with ACS symptoms was first referred to a hospital or directly presented at a hospital, and when a person leaves the hospital, either from the emergency department or is discharged from the hospital. Some of the data relevant to the management of patients attending hospital with ACS symptoms is specified for collection at follow-up visits with a specialist or as a non-admitted patient.

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 this data set 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 data set provide a framework for:

- promoting the delivery of evidenced-based acute coronary syndrome management care to patients;
- facilitating the ongoing improvement in the quality and safety of acute coronary syndrome management in acute care settings in Australia and New Zealand;
- improving the epidemiological and public health understanding of this syndrome; and
- 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 the ACS NBPDS 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.

The ACS NBPDS is 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 presented in the National Heart Foundation of Australia/Cardiac Society of Australia and New Zealand Guidelines for the management of acute coronary syndromes (MJA 2006;184;S1-S32). 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 NBPDS should ensure that the data is internationally comparable.

Many of the data elements in this data 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 data set were also 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 the ACS NBPDS), with that collected through other means (e.g. public health surveys, reports).

A set of 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 (Heart Foundation) and the Cardiac Society of Australia and New Zealand (CSANZ) initiative was diverse and included representation from the following organisations: the Heart Foundation, the CSANZ, the Australasian College of Emergency Medicine, the Australian Institute of Health and Welfare, the Australasian Society of Cardiac & Thoracic Surgeons, Royal Australian 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 specification, 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 and usage attributes

Guide for use:

There are six data clusters in the Acute coronary syndrome (clinical) NBPDS. To ensure a complete description of the clinical management of acute coronary syndromes (ACS), it is recommended that all data clusters be collected along with the individual data elements during the current ACS event by the individual hospital or health service area.

The six data clusters in this NBPDS include:

1. Acute coronary syndrome clinical event cluster
2. Functional stress test cluster
3. Electrocardiogram cluster
4. Ventricular ejection fraction cluster
5. Acute coronary syndrome pharmacotherapy cluster
6. Coronary artery cluster

Collection methods:

The Acute coronary syndrome NBPDS 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 NBPDS 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.

Implementation start date: 01/07/2013

Relational attributes

Related metadata references:

Supersedes Acute coronary syndrome (clinical) DSS

- Health, Superseded 02/05/2013

Has been superseded by Acute coronary syndrome (clinical) NBPDS

- Health, Recorded 15/05/2017

Metadata items in this Data Set Specification Show more detail

Seq No.	Metadata item	Obligation	Max occurs
-	Acute coronary syndrome clinical event cluster	Conditional	1
-	Acute coronary syndrome pharmacotherapy data cluster	Optional	1
-	Coronary artery cluster	Optional	1
-	Electrocardiogram cluster	Optional	1
-	Functional stress test cluster	Optional	1
-	Ventricular ejection fraction cluster	Conditional	1
-	Emergency department stay—transport mode (arrival), code N	Optional	1
-	Episode of admitted patient care—admission date, DDMMYYYY	Optional	1
-	Episode of admitted patient care—admission time, hhmm	Optional	1
-	Episode of admitted patient care—separation date, DDMMYYYY	Optional	1
-	Episode of admitted patient care—separation mode, code N	Optional	1
-	Episode of care—principal diagnosis, code (ICD-10-AM 8th edn) ANN{.N[N]}	Optional	1
-	Episode of care—principal source of funding, hospital code NN	Optional	1
-	Establishment—organisation identifier (Australian), NNX[X]NNNNN	Optional	1
-	Health service event—presentation date, DDMMYYYY	Optional	1
-	Health service event—presentation time, hhmm	Optional	1
-	Health service event—referral to rehabilitation service date, DDMMYYYY	Optional	1
-	Laboratory standard—upper limit of normal range for creatine kinase isoenzyme, total units per litre N[NNN]	Optional	1
-	Laboratory standard—upper limit of normal range for creatine kinase myocardial band isoenzyme, total micrograms per litre N[NNN]	Conditional	1
-	Laboratory standard—upper limit of normal range for creatine kinase myocardial band isoenzyme, total units per litre N[NNN]	Conditional	1
-	Laboratory standard—upper limit of normal range for troponin assay, total micrograms per litre N[NNN]	Conditional	1
-	Laboratory standard—upper limit of normal range of glycosylated haemoglobin, percentage N[N].N	Conditional	1
-	Non-admitted patient emergency department service episode—triage category, code N	Conditional	1
-	Non-admitted patient emergency department service episode—triage date, DDMMYYYY	Optional	1
-	Non-admitted patient emergency department service episode—triage time, hhmm	Optional	1
-	Non-admitted patient emergency department service episode—type of visit to emergency department, code N	Optional	1
-	Person with acute coronary syndrome—bleeding location, instrumented code N(N)	Optional	1
-	Person with acute coronary syndrome—bleeding location, non-instrumented code N(N)	Optional	1
-	Person with acute coronary syndrome—lifestyle counselling type, code N	Optional	1
-	Person with acute coronary syndrome—underlying cause of acute coronary syndrome, code N	Optional	1
-	Person—acute coronary syndrome procedure type, code NN	Optional	1
-	Person—acute coronary syndrome related medical history, code NN	Optional	1

-	Person—acute coronary syndrome risk stratum, code N	Optional	1
-	Person—acute coronary syndrome symptoms onset date, DDMMYYYY	Optional	1
-	Person—acute coronary syndrome symptoms onset time, hhmm	Optional	1
-	Person—angina episodes count (24 hours preceding hospital presentation), total number NN[N]	Conditional	1
-	Person—angina status, Canadian Cardiovascular Society code N	Optional	1
-	Person—bleeding episode status, Thrombolysis in Myocardial Infarction (TIMI) code N	Optional	1
-	Person—chest pain pattern, code N	Optional	1
-	Person—cholesterol level (measured), total millimoles per litre N[N].N	Optional	1
-	Person—clinical evidence status (acute coronary syndrome related medical history), yes/no code N	Optional	1
-	Person—clinical procedure timing, code N	Optional	1
-	Person—country of birth, code (SACC 2011) NNNN	Optional	1
-	Person—C-reactive protein level (measured), total milligrams per litre N[NN].N	Optional	1
-	Person—C-reactive protein level measured date, DDMMYYYY	Optional	1
-	Person—C-reactive protein level measured time, hhmm	Optional	1
-	Person—creatine kinase isoenzyme level (measured), total units per litre N[NNN]	Conditional	1
-	Person—creatine kinase myocardial band isoenzyme measured date, DDMMYYYY	Conditional	1
-	Person—creatine kinase myocardial band isoenzyme measured time, hhmm	Conditional	1
-	Person—creatine kinase-myocardial band isoenzyme level (measured), total micrograms per litre N[NNN]	Conditional	1
-	Person—creatine kinase-myocardial band isoenzyme level (measured), total units per litre N[NNN]	Conditional	1
-	Person—creatinine serum level measured date, DDMMYYYY	Conditional	1
-	Person—creatinine serum level, total micromoles per litre NN[NN]	Conditional	1
-	Person—date of birth, DDMMYYYY	Optional	1
-	Person—date of death, DDMMYYYY	Optional	1
-	Person—diabetes mellitus status, code NN	Conditional	1
-	Person—diabetes therapy type, code NN	Conditional	1
-	Person—diagnostic cardiac catheterisation date, DDMMYYYY	Conditional	1
-	Person—diagnostic cardiac catheterisation time, hhmm	Conditional	1
-	Person—dyslipidaemia treatment with anti-lipid medication indicator (current), code N	Conditional	1
-	Person—glycosylated haemoglobin level (measured), percentage N[N].N	Optional	1
-	Person—height (measured), total centimetres NN[N].N	Conditional	1
-	Person—high-density lipoprotein cholesterol level (measured), total millimoles per litre [N].NN	Optional	1
-	Person—hypertension treatment with antihypertensive medication indicator (current), code N	Optional	1
-	Person—implantable cardiac defibrillator procedure date, DDMMYYYY	Optional	1
-	Person—implantable cardiac defibrillator procedure time, hhmm	Optional	1
-	Person—Indigenous status, code N	Optional	1
-	Person—intra-aortic balloon pump procedure date, DDMMYYYY	Conditional	1
-	Person—intra-aortic balloon pump procedure time, hhmm	Conditional	1
-	Person—Killip classification, code N	Optional	1
-	Person—low-density lipoprotein cholesterol level (calculated), total millimoles per litre N[N].N	Conditional	1

-	Person—most recent stroke date, DDMMYYYY	Conditional	1
-	Person—non-invasive ventilation administration date, DDMMYYYY	Conditional	1
-	Person—non-invasive ventilation administration time, hhmm	Optional	1
-	Person—pacemaker insertion date, DDMMYYYY	Optional	1
-	Person—pacemaker insertion time, hhmm	Conditional	1
-	Person—person identifier, XXXXXX[X(14)]	Optional	1
-	Person—premature cardiovascular disease family history status, code N	Optional	1
-	Person—reason for readmission following acute coronary syndrome episode, code N[N]	Optional	1
-	Person—sex, code N	Optional	1
-	Person—tobacco smoking status, code N	Optional	1
-	Person—triglyceride level (measured), total millimoles per litre N[N].N	Optional	1
-	Person—troponin assay type, code N	Optional	1
-	Person—troponin level (measured), total micrograms per litre NN.NN	Optional	1
-	Person—troponin level measured date, DDMMYYYY	Optional	1
-	Person—troponin level measured time, hhmm	Optional	1
-	Person—underlying cause of death, code (ICD-10 2nd edn) ANN-ANN	Optional	1
-	Person—units of blood transfused, total N[NNN]	Conditional	1
-	Person—vascular condition status (history), code NN	Conditional	1
-	Person—weight (measured), total kilograms N[NN].N	Conditional	1