

Data Elements

U – Z

(NOTE: There are no data elements starting with X or Z)

Urgency of admission

Identifying and Definitional Attributes

| | | |
|--------------------------|--|----------------------|
| Knowledgebase ID: | 000425 | Version No: 1 |
| Metadata type: | Data Element | |
| Admin. status: | Current | |
| | 01/07/00 | |
| Definition: | <p>Whether the admission has an urgency status assigned and, if so, whether admission occurred on an emergency basis.</p> <p>An emergency admission is an admission of a patient for care or treatment which, in the opinion of the treating clinician, is necessary and admission for which should occur within 24 hours.</p> <p>An elective admission is an admission of a patient for care or treatment which, in the opinion of the treating clinician, is necessary and admission for which can be delayed for at least 24 hours. Admissions for which an urgency status is usually not assigned are:</p> <ul style="list-style-type: none"> - admissions for normal delivery (obstetric) - admissions which begin with the birth of the patient, or when it was intended that the birth occur in the hospital, commence shortly after the birth of the patient - statistical admissions - planned readmissions for the patient to receive limited care or treatment for a current condition, for example dialysis or chemotherapy. | |
| Context: | Admitted patient care. | |

Relational and Representational Attributes

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|---------------------------------|--|---|-------------------------------------|---|------------------------------------|---|-----------------------------|---|------------------------|
| Datatype: | Numeric | | | | | | | | |
| Representational form: | Code | | | | | | | | |
| Representational layout: | N(.N) | | | | | | | | |
| Minimum size: | 1 | | | | | | | | |
| Maximum size: | 3 | | | | | | | | |
| Data domain: | <table> <tr> <td>1</td> <td>Urgency status assigned - emergency</td> </tr> <tr> <td>2</td> <td>Urgency status assigned - elective</td> </tr> <tr> <td>3</td> <td>Urgency status not assigned</td> </tr> <tr> <td>9</td> <td>Not known/not reported</td> </tr> </table> | 1 | Urgency status assigned - emergency | 2 | Urgency status assigned - elective | 3 | Urgency status not assigned | 9 | Not known/not reported |
| 1 | Urgency status assigned - emergency | | | | | | | | |
| 2 | Urgency status assigned - elective | | | | | | | | |
| 3 | Urgency status not assigned | | | | | | | | |
| 9 | Not known/not reported | | | | | | | | |

| | |
|-----------------------|--|
| Guide for use: | <p>Emergency admission:</p> <p>The following guidelines may be used by health professionals, hospitals and health insurers in determining whether an emergency admission has occurred. These guidelines should not be considered definitive.</p> <p>An emergency admission occurs if one or more of the following clinical conditions are applicable such that the patient required admission within 24 hours.</p> <p>Such a patient would be:</p> <ul style="list-style-type: none"> - at risk of serious morbidity or mortality and requiring urgent assessment and/or resuscitation or |
|-----------------------|--|

- suffering from suspected acute organ or system failure or
- suffering from an illness or injury where the viability or function of a body part or organ is acutely threatened or
- suffering from a drug overdose, toxic substance or toxin effect or
- experiencing severe psychiatric disturbance whereby the health of the patient or other people is at immediate risk or
- suffering severe pain where the viability or function of a body part or organ is suspected to be acutely threatened or
- suffering acute significant haemorrhage and requiring urgent assessment and treatment or
- suffering gynaecological or obstetric complications or
- suffering an acute condition which represents a significant threat to the patient's physical or psychological wellbeing or
- suffering a condition which represents a significant threat to public health.

If an admission meets the definition of emergency above, it is categorised as emergency, regardless of whether the admission occurred within 24 hours of such a categorisation being made, or after 24 hours or more.

Elective admissions:

If an admission meets the definition of elective above, it is categorised as elective, regardless of whether the admission actually occurred after 24 hours or more, or it occurred within 24 hours. The distinguishing characteristic is that the admission could be delayed by at least 24 hours.

Scheduled admissions:

A patient who expects to have an elective admission will often have that admission scheduled in advance. Whether or not the admission has been scheduled does not affect the categorisation of the admission as emergency or elective, which depends only on whether it meets the definitions above. That is, patients both with and without a scheduled admission can be admitted on either an emergency or elective basis.

Admissions from elective surgery waiting lists:

Patients on waiting lists for elective surgery are assigned a Clinical urgency status which indicates the clinical assessment of the urgency with which a patient requires elective hospital care. On admission, they will also be assigned an Urgency of admission category, which may or may not be elective.

- Patients who are removed from elective surgery waiting lists on admission as an elective patient for the procedure for which they were waiting (see data domain value 1 in data element Reason for removal) will be assigned an Urgency of admission code of 2. In that case, their Clinical urgency category could be regarded as further detail on how urgent their admission was.
- Patients who are removed from elective surgery waiting lists on admission as an emergency patient for the procedure for which they were waiting (see data domain value 2 in data element Reason for removal), will be assigned an Urgency of admission code of 1.

Admissions for which an urgency status is usually not assigned:

An urgency status can be assigned for admissions of the types listed above for which an urgency status is not usually assigned. For example, a patient who is to have an obstetric admission may have one or more of the clinical conditions listed above and be admitted on an emergency basis.

Use of code 9.

The not known/not reported category is to be used when it is not known whether or not an urgency status has been assigned, or when an urgency status has been assigned but is not known.

Verification rules:**Collection methods:****Related metadata:**

relates to the data element Clinical urgency vers 2

relates to the data element concept Elective care vers 1

Administrative Attributes**Source document:****Source organisation:**

Emergency Definition Working Party

National Health Data Committee

Information model link:

NHIM - Assessment event

Data Set Specifications:

NMDS - Admitted patient care

Start date

01/07/2000

End date**Comments:**

Vascular history

Identifying and Definitional Attributes

Knowledgebase ID: 000676 **Version No:** 1

Metadata type: Data Element

Admin. status: Current
01/01/03

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

Datatype: Numeric

Representational form: Code

Representational layout: NN

Minimum size: 2

Maximum size: 2

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

Administrative Attributes

Source document: International Classification of Diseases – Tenth Revision – Australian Modification (3rd edition 2002), National Centre for Classification in Health, Sydney.

Source organisation: CV-Data Working Group
National Centre for Classification in Health
National Data Standards for Injury Surveillance Advisory Group

Information model link:

NHIM Physical wellbeing

| Data Set Specifications: | Start date | End date |
|---|-------------------|-----------------|
| DSS – Cardiovascular disease (clinical) | 01/01/2003 | |

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.

Vascular procedures

Identifying and Definitional Attributes

| | | |
|--------------------------|--|----------------------|
| Knowledgebase ID: | 000677 | Version No: 1 |
| Metadata type: | Data Element | |
| Admin. status: | Current | |
| | 01/01/03 | |
| Definition: | Describes the vascular procedures the person has undergone. | |
| Context: | Public health and health care: This data element is important for tracking cardiovascular patient management against appropriate practice for cardiovascular presentation(s) and risk factor(s) the person may exhibit. | |

Relational and Representational Attributes

| | |
|---------------------------------|--|
| Datatype: | Numeric |
| Representational form: | Code |
| Representational layout: | NN |
| Minimum size: | 1 |
| Maximum size: | 2 |
| Data domain: | <ul style="list-style-type: none"> 01 Amputation for arterial vascular insufficiency 02 Carotid endarterectomy 03 Carotid angioplasty/stenting 04 Coronary angioplasty/stenting 05 Coronary artery bypass grafting 06 Renal artery angioplasty/stenting 07 Heart transplant 08 Heart valve surgery 09 Abdominal aortic aneurism repair/bypass graft/stenting 10 Cerebral circulation angioplasty/stenting 11 Femoral/popliteal bypass/graft/stenting 12 Congenital heart and blood vessel defect surgery 13 Permanent pacemaker implantation 14 Implantable cardiac defibrillator 98 Other 99 Unknown/not recorded |

Guide for use:

Verification rules:

Collection methods: Ideally, Vascular procedure information is derived from and substantiated by clinical documentation.

Related metadata: is used in conjunction with Service contact date vers 1

Administrative Attributes

Source document: Australian Institute of Health and Welfare (AIHW) 2001. Heart, stroke and vascular diseases – Australian facts 2001. AIHW Cat. No. CVD 13. Canberra: AIHW, National Heart foundation of Australia, National Stroke Foundation of Australia (CVD Series No. 14).

Source organisation: CV-Data Working Group

Information model link:

NHIM Physical wellbeing

Data Set Specifications:

DSS - Cardiovascular disease (clinical)

Start date

End date

01/01/2003

Comments:

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

Visual acuity

Identifying and Definitional Attributes

| | | |
|--------------------------|--|----------------------|
| Knowledgebase ID: | 000847 | Version No: 1 |
| Metadata type: | Data Element | |
| Admin. status: | Current | |
| | 01/01/03 | |
| Definition: | The visual acuity test measures the smallest letters that a person can read on a standardised chart at a distance of 6 metres (20 feet) wearing glasses if needed. | |
| Context: | Public health, health care and clinical settings. | |

Relational and Representational Attributes

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|---------------------------------|--|----|-----|----|-----|----|-----|----|------|----|------|----|------|----|------|----|------|----|--------------------|----|--------------------|----|---------------------|----|------------|----|-------|----|-----------------------------------|
| Datatype: | Numeric | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Representational form: | Code | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Representational layout: | NN | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Minimum size: | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Maximum size: | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Data domain: | <table> <tr><td>01</td><td>6/5</td></tr> <tr><td>02</td><td>6/6</td></tr> <tr><td>03</td><td>6/9</td></tr> <tr><td>04</td><td>6/12</td></tr> <tr><td>05</td><td>6/18</td></tr> <tr><td>06</td><td>6/24</td></tr> <tr><td>07</td><td>6/36</td></tr> <tr><td>08</td><td>6/60</td></tr> <tr><td>09</td><td>CF (count fingers)</td></tr> <tr><td>10</td><td>HM (hand movement)</td></tr> <tr><td>11</td><td>PL (perceive light)</td></tr> <tr><td>12</td><td>BL (blind)</td></tr> <tr><td>13</td><td>6/7.5</td></tr> <tr><td>99</td><td>Not stated/inadequately described</td></tr> </table> | 01 | 6/5 | 02 | 6/6 | 03 | 6/9 | 04 | 6/12 | 05 | 6/18 | 06 | 6/24 | 07 | 6/36 | 08 | 6/60 | 09 | CF (count fingers) | 10 | HM (hand movement) | 11 | PL (perceive light) | 12 | BL (blind) | 13 | 6/7.5 | 99 | Not stated/inadequately described |
| 01 | 6/5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 02 | 6/6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 03 | 6/9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 04 | 6/12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 05 | 6/18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 06 | 6/24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 07 | 6/36 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 08 | 6/60 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 09 | CF (count fingers) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | HM (hand movement) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | PL (perceive light) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | BL (blind) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | 6/7.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 99 | Not stated/inadequately described | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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|-----------------------|--|
| Guide for use: | <p>Test wearing distance glasses if prescribed. Use pinhole if vision less than 6/6. Record actual result for both right and left eyes (this is a repeating field):</p> <ul style="list-style-type: none"> - 1st field: right eye - 2nd field: left eye. |
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Verification rules:

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|----------------------------|---|
| Collection methods: | <p>One of the most often utilised tests for visual acuity uses the Snellen chart.</p> <ul style="list-style-type: none"> • At a distance of 6 metres all subjects should be able to read the 6/6 line with each eye using the proper refractive correction. • Both eyes are to be opened and then cover one eye with the ocular occluder. |
|----------------------------|---|

- The observer has to read out the smallest line of letters that he/she can see from the chart.
- This is to be repeated with the other eye.

Eye examination should be performed by an ophthalmologist or a suitably trained clinician:

- within five years of diagnosis and then every 1–2 years for patients whose diabetes onset was at age under 30 years
- at diagnosis and then every 1–2 years for patients whose diabetes onset was at age 30 years or more.

Related metadata: relates to the data element Health professionals attended – diabetes mellitus vers 1
 relates to the data element Blindness – diabetes complication vers 1
 relates to the data element Cataract – history vers 1
 relates to the data element Ophthalmological assessment – outcome vers 1
 relates to the data element Ophthalmoscopy – performed vers 1
 relates to the data element Referred to ophthalmologist – diabetes mellitus vers 1

Administrative Attributes

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

Source organisation: National Diabetes Data Working Group

Information model link:

NHIM Physical wellbeing

Data Set Specifications:

DSS – Diabetes (clinical)

Start date

End date

01/01/2003

Comments:

Patients with diabetes have an increased risk of developing several eye complications including retinopathy, cataract and glaucoma that can lead to loss of vision. Regular eye checkups are important for patients suffering from diabetes mellitus. This helps to detect and treat abnormalities early and to avoid or postpone vision-threatening complications. Assessment by an ophthalmologist is essential:

- at initial examination if the corrected visual acuity is less than 6/6 in either eye
- if at subsequent examinations declining visual acuity is detected
- if any retinal abnormality is detected
- if clear view of retina is not obtained.

References:

Vision Australia, No 2, 1997/8; University of Melbourne

World Health Organization

US National Library of Medicine

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

Principles of Care and Guidelines for the Clinical Management of Diabetes Mellitus

Waist circumference – measured

Identifying and Definitional Attributes

| | | |
|--------------------------|---|----------------------|
| Knowledgebase ID: | 000372 | Version No: 2 |
| Metadata type: | Data Element | |
| Admin. status: | Current | |
| | 01/01/03 | |
| Definition: | A person's waist circumference measured half way between the inferior margin of the last rib and the crest of the ilium in the mid-axillary plane. In order to ensure consistency in measurement, the measurement protocol described under Collection methods should be used. | |
| Context: | Public health, health care and clinical settings: Originally used in the calculation of Waist-to-hip ratio which requires the measurement of hip circumference and waist circumference as a predictor of obesity-related morbidity and mortality. More recently it has been used in it's own right as an indicator of risk associated with excess abdominal fat. | |

Relational and Representational Attributes

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|---------------------------------|--|
| Datatype: | Numeric |
| Representational form: | Quantitative value |
| Representational layout: | NNN.N |
| Minimum size: | 4 |
| Maximum size: | 5 |
| Data domain: | Distance in centimetres, measured to the nearest 0.1cm. 999.9 Not collected |
| Guide for use: | If measured waist circumference is not able to be collected, code 999.9 The measurement is recorded as a continuous variable measured to the nearest 0.1 cm. |
| Verification rules: | |
| Collection methods: | The collection of anthropometric measurements, particularly in those who are overweight or obese or who are concerned about their weight, should be performed with great sensitivity, and without drawing attention to an individual's weight. Measurement protocol: The measurement of waist circumference requires a narrow (< 7 mm wide), flexible, inelastic tape measure. The kind of tape used should be described and reported. The graduations on the tape measure should be at 0.1 cm intervals and the tape should have the capacity to measure up to 200 cm. Measurement intervals and labels should be clearly readable under all conditions of use of the tape measure. The subject should remove any belts and heavy outer clothing. Measurement of waist circumference should be taken over at most one layer of light clothing. Ideally the measure is made directly over the skin. The subject stands comfortably with weight evenly distributed on both feet, and the feet separated about 25–30 cm. The arms should hang loosely at the sides. Posture can affect waist circumference. The measurement is taken midway between the inferior margin of the last rib and the crest of the ilium, in |

the mid-axillary plane. Each landmark should be palpated and marked, and the midpoint determined with a tape measure and marked.

The circumference is measured with an inelastic tape maintained in a horizontal plane, at the end of normal expiration. The tape is snug, but does not compress underlying soft tissues. The measurer is positioned by the side of the subject to read the tape. To ensure contiguity of the two parts of the tape from which the circumference is to be determined, the cross-handed technique of measurement, as described by Norton et al. (1996), should be used. Ideally an assistant will check the position of the tape on the opposite side of the subject's body.

The measurement is recorded at the end of a normal expiration to the nearest 0.1 cm. Take a repeat measurement and record it to the nearest 0.1 cm. If the two measurements disagree by more than 1 cm, take a third measurement. All raw measurements should be recorded on the data collection form. If practical, it is preferable to enter the raw data into the database as this enables intra-observer and, where relevant, inter-observer errors to be assessed. The subject's measured waist circumference is subsequently calculated as the mean of the two observations, or the mean of the two closest measurements if a third is taken, and recorded on the form. If only a mean value is entered into the database then the data collection forms should be retained.

It may be necessary to round the mean value to the nearest 0.1 cm. If so, rounding should be to the nearest even digit to reduce systematic over-reporting (Armitage & Berry 1994). For example, a mean value of 72.25 cm would be rounded to 72.2 cm, while a mean value of 72.35 cm would be rounded to 72.4 cm.

Validation and quality control measures:

Steel tapes should be checked against a 1 metre engineer's rule every 12 months. If tapes other than steel are used they should be checked daily against a steel rule.

Within- and, if relevant, between-observer variability should be reported. They can be assessed by the same (within-) or different (between-) observers repeating the measurement, on the same subjects, under standard conditions after a short time interval. The standard deviation of replicate measurements (technical error of measurement (Pederson & Gore 1996)) between observers should not exceed 2% and be less than 1.5% within observers.

Extreme values at the lower and upper end of the distribution of measured waist circumference should be checked both during data collection and after data entry. Individuals should not be excluded on the basis of true biological difference.

Last-digit preference, and preference or avoidance of certain values, should be analysed in the total sample and (if relevant) by observer, survey site and over time if the survey period is long.

Related metadata: supersedes previous data element Adult abdominal circumference - measured vers 1
is used in the calculation of Waist-to-hip ratio vers 2

Administrative Attributes

Source document: The measurement protocol described below is that recommended by the World Health Organization (WHO Expert Committee 1995) which was adapted from Lohman et al. (1988) and the International Society for the Advancement of Kinanthropometry as described by Norton et al. (1996).

Source organisation: World Health Organization (see also Comments) and the International Society for the Advancement of Kinanthropometry.

Information model link:

NHIM Physical characteristic

Data Set Specifications:

DSS - Cardiovascular disease (clinical)

Start date**End date**

01/01/2003

Comments:

This data element applies to persons of all ages. It is recommended for use in population surveys and health care settings.

There is evidence that waist circumference alone might be used to identify people at health risk both from being overweight and from having a central fat distribution (Lean et al. 1995; Han et al. 1995; Pouliot et al. 1994; Seidell et al. 1992). It has been suggested that waist circumference as an index of truncal adiposity in adults may have certain advantages over other measurements of adiposity in predicting obesity related diseases. However, among children and adolescents, waist circumference measures should only be used as a measure of variation in an individual. As yet, no age appropriate cut-off points indicative of risk factors have been developed for use among children and adolescents.

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. However 5-year age groups are not generally suitable for children and adolescents. 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 reporting purposes, it may be desirable to present waist circumference in categories. It is recommended that 5-cm groupings are used for this purpose. Waist circumference should not be rounded before categorisation. The following categories may be appropriate for describing the waist circumferences of Australian men, women children and adolescents, although the range will depend on the population.

Waist < 35 cm

35 cm = Waist < 40 cm

40 cm = Waist < 45 cm

... in 5 cm categories

105 cm = Waist < 110 cm

Waist => 110 cm

Waist circumference risk indicator – adults

Identifying and Definitional Attributes

| | | |
|--------------------------|--|----------------------|
| Knowledgebase ID: | 000851 | Version No: 1 |
| Metadata type: | Derived Data Element | |
| Admin. status: | Current | |
| | 01/07/03 | |
| Definition: | The sex specific category of risk of metabolic complications associated with excess abdominal adiposity in adult caucasians. | |

Context:

Public health and health care:

Sex specific waist circumference risk indicator is used as an indicator of risk of metabolic complications associated with overweight and obesity including dyslipidaemia, glucose intolerance and hypertension. On a population basis there is a strong association between abdominal obesity and health risk. Body fat distribution has emerged as an important predictor of obesity-related morbidity and mortality. Abdominal obesity, which is more common in men than women, has, in epidemiological studies, been closely associated with conditions such as coronary heart disease, stroke, non-insulin dependent diabetes mellitus and high blood pressure. Waist circumference as an indicator of risk can be used:

- to indicate the prevalence of abdominal obesity and its sociodemographic distribution (problem identification)
- to evaluate health promotion and disease prevention programs (assessment of interventions)
- to monitor progress towards national public health policy
- to ascertain determinants and consequences of abdominal obesity
- in nutrition and physical activity surveillance and long-term planning.

Waist circumference is a convenient and simple measurement that is unrelated to height, correlates closely with body mass index (BMI) and waist-to-hip ratio (WHR) and is an approximate index of intra-abdominal fat mass and total body fat. Changes in waist circumference can reflect changes in risk factors for cardiovascular disease and other forms of chronic disease, even though the risks seem to vary in different populations.

Relational and Representational Attributes

| | | |
|---------------------------------|---------|---|
| Datatype: | Numeric | |
| Representational form: | Code | |
| Representational layout: | N | |
| Minimum size: | 1 | |
| Maximum size: | 1 | |
| Data domain: | 1 | Not at risk (male waist circumference < 94 cm, female waist circumference < 80 cm) |
| | 2 | Increased (male waist circumference >= 94 cm, female waist circumference >= 80 cm) |
| | 3 | Substantially increased (male waist circumference >= 102 cm, female waist circumference >= 88 cm) |
| | 9 | Not stated/inadequately described |

Guide for use: Waist circumference risk indicator – adults cannot be determined if Waist circumference measured has not been collected (i.e. is coded to 999.9) and/or sex is not stated (i.e. coded to 9).

Verification rules:

Collection methods: Waist circumference risk indicator should be derived after the data entry of waist circumference measured. It should be stored on the raw data set as a continuous variable and should not be aggregated or rounded.

Related metadata: is used in conjunction with Sex vers 3
is used in conjunction with Waist circumference – measured vers 2

Administrative Attributes

Source document: Obesity: Preventing and Managing the Global Epidemic: Report of a WHO Expert Committee. Geneva: WHO, 2000 as described by Han TS et al. 1995.

Source organisation: World Health Organization

Information model link:

NHIM Surveillance/monitoring event

Data Set Specifications: **Start date** **End date**

Comments: This data element applies to persons aged 18 years or older. It is recommended for use in population surveys and health care settings.

Recent evidence suggests that waist circumference may provide a more practical correlate of abdominal fat distribution and associated ill health.

The identification of risk using waist circumference is population-specific and will depend on levels of obesity and other risk factors for cardiovascular disease and non-insulin dependant diabetes mellitus.

Populations differ in the level of risk associated with a particular waist circumference, so that globally applicable cut-off points cannot be developed. For example, complications associated with abdominal fat in black women and those of South Asian descent are markedly higher for a given level of BMI than in Europeans. Also, although women have almost the same absolute risk of coronary heart disease as men at the same Waist-to-hip ratio, they show increases in relative risk of coronary heart disease at lower waist circumferences than men. Thus, there is a need to develop sex-specific waist circumference cut-off points appropriate for different populations. Hence, the cut-off points used for this element are associated with obesity in caucasians. This issue is being investigated further.

Cut-off points for children and adolescents are also being developed. Research shows that a high childhood BMI and high trunk skin fold values are predictive of abdominal obesity as an adult and waist circumference measures in childhood track well into adulthood.

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 and Indigenous status and smoking. Data elements are being developed for physical activity.

Waist-to-hip ratio

Identifying and Definitional Attributes

| | | |
|--------------------------|---|----------------------|
| Knowledgebase ID: | 000373 | Version No: 2 |
| Metadata type: | Derived Data Element | |
| Admin. status: | Current | |
| | 01/07/03 | |
| Definition: | A ratio calculated by dividing the waist circumference of an adult person by the hip circumference of that same person. | |

| | |
|-----------------|---|
| Context: | Public health and health care: |
| | Body fat distribution has emerged as an important predictor of obesity-related morbidity and mortality. Abdominal obesity, which is more common in men than women, has, in epidemiological studies, been closely associated with conditions such as coronary heart disease, stroke, non-insulin dependent diabetes mellitus and high blood pressure. |
| | Waist-to-hip ratio (WHR) can be used: <ul style="list-style-type: none"> - to indicate the prevalence of abdominal obesity and its sociodemographic distribution (problem identification) - to evaluate health promotion and disease prevention programs (assessment of interventions) - to monitor progress towards national public health policy - to ascertain determinants and consequences of abdominal obesity - in nutrition and physical activity surveillance and long-term planning. |

Relational and Representational Attributes

| | |
|---------------------------------|--|
| Datatype: | Numeric |
| Representational form: | Quantitative value |
| Representational layout: | N.NN |
| Minimum size: | 4 |
| Maximum size: | 4 |
| Data domain | Calculated value to two decimal places |

| | |
|-----------------------|--|
| Guide for use: | <p>Formula:</p> <p>WHR = Waist circumference (cm) divided by hip circumference (cm).</p> <p>Adult waist-to-hip ratio is a continuous variable. Adult waist-to-hip ratio cannot be calculated if either component necessary for its calculation (i.e. abdominal circumference or hip circumference) has not been collected (i.e. is coded to 999.9).</p> <p>Adult cut-off points for waist-to-hip ratio, that may define increased risk of cardiovascular disease and all cause mortality, range from 0.9 to 1.0 for men and 0.8 to 0.9 for women (Croft et al. 1995, Bray 1987, Bjorntorp 1985). These values are based primarily on evidence of increased risk of death in European populations, and may not be appropriate for all age and ethnic groups.</p> <p>In Australia and New Zealand, the cutoffs of > 0.9 for males and > 0.8 for females were used in the Australian Bureau of Statistics' 1995 National Nutrition Survey.</p> <p>As there are no cut-off points for waist-to-hip ratio for children and adolescents, it is not necessary to calculate this item for those aged under 18 years.</p> |
|-----------------------|--|

Verification rules:

Collection methods: WHR should be derived after the data entry of waist circumference and hip circumference. It should be stored on the raw data set as a continuous variable and should not be aggregated or rounded.

Related metadata: supersedes previous derived data element Adult abdomen to hip ratio vers 1
is calculated using Hip circumference – measured vers 2
is calculated using Waist circumference – measured vers 2

Administrative Attributes**Source document:**

National Health Data Committee

Source organisation:

National Centre for Monitoring Cardiovascular Disease

Australian Institute of Health and Welfare

Information model link:

NHIM Physical characteristic

Data Set Specifications:*Start date**End date***Comments:**

This data element applies to persons aged 18 years or older as no cut off points have been developed for children and adolescents. It is recommended for use in population surveys and health care settings.

More recently it has emerged that waist circumference alone, or in combination with other metabolic measures, is a better indicator of risk and reduces the errors in waist-to-hip ratio measurements. Waist-to-hip ratio is therefore no longer a commonly used measure.

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.

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.

Waiting list category

Identifying and Definitional Attributes

| | | |
|--------------------------|---|----------------------|
| Knowledgebase ID: | 000176 | Version No: 3 |
| Metadata type: | Data Element | |
| Admin. status: | Current | |
| | 01/01/95 | |
| Definition: | The type of elective hospital care that a patient requires. | |

| | |
|-----------------|--|
| Context: | Admitted patients: |
| | Hospitals maintain waiting lists which may include patients awaiting hospital care other than elective surgery – for example, dental surgery and oncology treatments. This item is necessary to distinguish patients awaiting elective surgery (code 1) from those awaiting other types of elective hospital care (code 2). The waiting period for patients awaiting transplant or obstetric procedures is largely independent of system resource factors. |

Relational and Representational Attributes

| | |
|---------------------------------|-------------------------------|
| Datatype: | Numeric |
| Representational form: | Code |
| Representational layout: | N |
| Minimum size: | 1 |
| Maximum size: | 1 |
| Data domain: | 1 Elective surgery 2 Other |

| | |
|-----------------------|--|
| Guide for use: | <p>Elective surgery comprises elective care where the procedures required by patients are listed in the surgical operations section of the Medicare Benefits Schedule, with the exclusion of specific procedures frequently done by non-surgical clinicians.</p> <p>Elective care is care that, in the opinion of the treating clinician, is necessary and admission for which can be delayed for at least twenty-four hours.</p> <p>Patients awaiting the following procedures should be classified as Code 2 – other:</p> <ul style="list-style-type: none"> • organ or tissue transplant procedures • procedures associated with obstetrics (e.g. elective caesarean section, cervical suture) • cosmetic surgery, i.e. when the procedure will not attract a Medicare rebate • biopsy of: <ul style="list-style-type: none"> – kidney (needle only) – lung (needle only) – liver and gall bladder (needle only) • bronchoscopy (including fibre-optic bronchoscopy) • peritoneal renal dialysis • haemodialysis • colonoscopy • endoscopic retrograde cholangio • pancreatography (ERCP) |
|-----------------------|--|

- endoscopy of:
 - biliary tract
 - oesophagus
 - small intestine
 - stomach
- endovascular interventional procedures
- gastroscopy
- miscellaneous cardiac procedures
- oesophagoscopy
- panendoscopy (except when involving the bladder)
- proctosigmoidoscopy
- sigmoidoscopy
- anoscopy
- urethroscopy and associated procedures
- dental procedures not attracting a Medicare rebate
- other diagnostic and non-surgical procedures.

These procedure terms are also defined by the ICD-10-AM (International Classification of Diseases – Tenth Revision – Australian Modification (3rd edition, 2002) National Centre for Classification in Health, Sydney) codes which are listed under Comments below. This coded list is the recommended, but optional, method for determining whether a patient is classified as requiring elective surgery or other care. All other elective surgery should be included in waiting list Code 1 – elective surgery.

Verification rules:

Collection methods:

Related metadata:

relates to the data element concept Elective care vers 1

is supplemented by the data element Indicator procedure vers 3

is used in conjunction with Patient listing status vers 3

supersedes previous data element Waiting list category – ICD-9-CM code vers 2

Administrative Attributes

Source document:

International Classification of Diseases – Tenth Revision – Australian Modification (3rd edition, 2002) National Centre for Classification in Health, Sydney.

Source organisation:

Hospital Access Program Waiting Lists Working Group
Waiting Times Working Group
National Health Data Committee

Information model link:

NHIM Request for/entry into service event

Data Set Specifications:

NMDS – Elective surgery waiting times

Start date

End date

01/07/1999

Comments:

The table of ICD-10-AM procedure codes was prepared by the National Centre for Classification in Health. Some codes were excluded from the list on the basis that they are usually performed by non-surgeon clinicians.

A more extensive and detailed listing of procedure descriptors is under development. This will replace the list in the Guide for use above, to facilitate more readily the identification of the exclusions when the list of codes is not used.

ICD-10-AM CODES FOR THE EXCLUDED PROCEDURES:

Organ or tissue transplant:

90172-00 [555] 90172-01 [555] 90204-00 [659] 90204-01 [659] 90205-00 [660]
 90205-01 [660] 13700-00 [801] 13706-08 [802] 13706-00 [802] 13706-06 [802]
 13706-07 [802] 13706-09 [802] 13706-10 [802] 30375-21 [817] 90317-00 [954]
 90324-00 [981] 36503-00 [1058] 36503-01 [1058] 14203-01 [1906]

Procedures associated with obstetrics:

16511-00 [1274] Obstetric Blocks [1330] to [1345] and [1347]

Biopsy (needle) of:

kidney: 36561-00 [1047]

lung: 38412-00 [550]

liver and gall bladder: 30409-00 [953] 30412-00 [953] 90319-01 [951]
 30094-04 [964]

Bronchoscopy:

41889-00 [543] 41892-00 [544] 41904-00 [546] 41764-02 [416] 41895-00 [544]
 41764-04 [532] 41892-01 [545] 41901-00 [545] 41898-00 [543] 41898-01 [544]
 41889-01 [543] 41849-00 [520] 41764-03 [520] 41855-00 [520]

Peritoneal renal dialysis:

13100-06 [1061] 13100-07 [1061] 13100-08 [1061] 13100-00 [1060]

Endoscopy of biliary tract:

30484-00 [957] 30484-01 [957] 30484-02 [974] 30494-00 [971] 30452-00 [971]
 30491-00 [958] 30491-01 [958] 30485-00 [963] 30485-01 [963] 30452-01 [958]
 30450-00 [959] 30452-02 [959] 90349-00 [975]

Endoscopy of oesophagus:

30473-03 [850] 30473-04 [861] 41822-00 [861] 30478-11 [856] 41819-00 [862]
 30478-10 [852] 30478-13 [861] 41816-00 [850] 41822-00 [861] 41825-00 [852]
 30478-12 [856] 41831-00 [862] 30478-12 [856] 30490-00 [853] 30479-00 [856]

Panendoscopy:

30476-03 [874] 32095-00 [891] 30568-00 [893] 30569-00 [894] 30473-05 [1005]
 30473-00 [1005] 30473-02 [1005] 30478-00 [1006] 30478-14 [1006] 30478-01 [1007]
 30478-02 [1007] 30478-03 [1007] 30478-15 [1007] 30478-16 [1007] 30478-17 [1007]
 30478-20 [1007] 30478-21 [1007] 30473-01 [1008] 30478-04 [1008] 30473-06 [1008]
 30478-18 [1008]

Endoscopy of large intestine, rectum and anus:

32075-00 [904] 32090-00 [905] 32084-00 [905] 30479-02 [908] 90308-00 [908]
 32075-01 [910] 32078-00 [910] 32081-00 [910] 32090-01 [911] 32093-00 [911]
 32084-01 [911] 32087-00 [911] 30479-01 [931] 90315-00 [933]

Miscellaneous cardiac:

38603-00 [642] 38600-00 [642] 38256-00 [647] 38256-01 [647] 38256-02 [647]
 38278-00 [648] 38278-01 [648] 38284-00 [648] 90202-00 [649] 38470-00 [649]
 38473-00 [649] 38281-01 [650] 38281-02 [650] 38281-03 [650] 38281-04 [650]
 38281-05 [650] 38281-06 [650] 38281-07 [651] 38281-07 [651] 38281-08 [651]
 38281-09 [651] 38281-10 [651] 38281-00 [652] 38278-02 [654] 38456-07 [654]
 90203-00 [654] 38284-01 [654] 90219-00 [663] 38281-11 [655] 38281-12 [655]
 38212-00 [665] 38209-00 [665] 38200-00 [667] 38203-00 [667] 38206-00 [667]
 35324-00 [740] 35315-00 [758] 35315-01 [758]

Endovascular interventional:

35304-01 [670] 35305-00 [670] 35304-00 [670] 35305-01 [670] 35310-00 [671]
 35310-01 [671] 35310-03 [671] 35310-04 [671] 35310-02 [671] 35310-05 [671]
 34524-00 [694] 13303-00 [694] 34521-01 [694] 32500-01 [722] 32500-00 [722]
 13300-01 [738] 13300-02 [738] 13319-00 [738] 13300-00 [738] 13815-00 [738]
 13815-01 [738] 34521-02 [738] 34530-04 [738] 90220-00 [738]

Urethroscopy:

36800-00 [1090] 36800-01 [1090] 37011-00 [1093] 37008-01 [1093] 37008-00 [1093]
 37315-00 [1112] 37315-01 [1116] 37318-01 [1116] 36815-01 [1116] 37854-00 [1116]
 35527-00 [1116] 37318-04 [1117]

Dental:

Blocks [450] to [490]

Other diagnostic and non-surgical:

90347-01 [983] 90760-00 [1780] 90767-00 [1780] 13915-00 [1780] 13918-00 [1780]

13921-00 [1780] 13927-00 [1780] 13939-00 [1780] 13942-00 [1780]

90768-00 [1780] Blocks [1820] to 1939], [1940] to [2016]

Waiting time at a census date

Identifying and Definitional Attributes

| | | |
|--------------------------|---|----------------------|
| Knowledgebase ID: | 000412 | Version No: 2 |
| Metadata type: | Derived Data Element | |
| Admin. status: | Current | |
| | 01/07/02 | |
| Definition: | The time elapsed (in days) for a patient on the elective surgery waiting list from the date they were added to the waiting list to a designated census date. | |
| Context: | Elective surgery: | |
| | This is a critical elective surgery waiting times data element. It is used to determine whether patients are overdue, or had extended waits at a census date. It is used to assist doctors and patients in making decisions about hospital referral, to assist in the planning and management of hospitals and in health care related research. | |

Relational and Representational Attributes

| | |
|---------------------------------|--------------------|
| Datatype: | Numeric |
| Representational form: | Quantitative value |
| Representational layout: | NNNN |
| Minimum size: | 1 |
| Maximum size: | 4 |

Data domain: Count in number of days

Guide for use: The number of days is calculated by subtracting the Listing date for care from the Census date, minus any days when the patient was 'not ready for care', and also minus any days the patient was waiting with a less urgent clinical urgency category than their clinical urgency category at the Census date.

Days when the patient was not ready for care is calculated by subtracting the date(s) the person was recorded as 'not ready for care' from the date(s) the person was subsequently recorded as again being 'ready for care'

If, at any time since being added to the waiting list for the elective surgical procedure, the patient has had a less urgent clinical urgency category than the category at the Census date, then the number of days waited at the less urgent clinical urgency category should be subtracted from the total number of days waited.

In cases where there has been only one category reassignment (i.e. to the more urgent category attached to the patient at Census date) the number of days at the less urgent clinical urgency category should be calculated by subtracting the Listing date for care from the Category reassignment date. If the patient's clinical urgency was reclassified more than once, days spent in each period of less urgent clinical urgency than the one applying at the Census date should be calculated by subtracting one Category reassignment date from the subsequent Category reassignment date, and then added together.

When a patient is admitted from an elective surgery waiting list but the surgery is cancelled and the patient remains on or is placed back on the waiting list within the same hospital, the time waited on the list should continue. Therefore at the Census date the patient's waiting time includes the number of days waited on an elective surgery waiting list, both before and after any cancelled surgery admission. The time waited before the cancelled surgery should be counted as part of the total time waited by the patient.

Verification rules:**Collection methods:****Related metadata:**

is calculated using Category reassignment date vers 2

is calculated using Census date vers 2

is qualified by Clinical urgency vers 2

is used in the derivation of Extended wait patient vers 1

is calculated using Listing date for care vers 4

is used in the derivation of Overdue patient vers 3

is calculated using Patient listing status vers 3

supersedes previous derived data element Waiting time at a census date vers 1

Administrative Attributes**Source document:**

Source organisation: Australian Institute of Health and Welfare
National Health Data Committee

Information model link:

NHIM Performance indicator

Data Set Specifications:**Start date****End date****Comments:**

Elective surgery waiting times data collections include measures of waiting times at removal and at designated census dates. This data element is used to measure waiting times at a designated census date whereas the data element Waiting time at removal from elective surgery waiting list measures waiting times at removal.

The calculation of waiting times for patients who are transferred from an elective surgery waiting list managed by one public acute hospital to another will be investigated in the future. In this case, the amount of time waited on previous lists should follow the patient to the next. Therefore at the Census date, their waiting time includes the total number of days on all lists (less days not ready for care and days in lower urgency categories).

Waiting time at removal from elective surgery waiting list

Identifying and Definitional Attributes

| | | |
|--------------------------|--|----------------------|
| Knowledgebase ID: | 000413 | Version No: 2 |
| Metadata type: | Derived Data Element | |
| Admin. status: | Current | |
| | 01/07/02 | |
| Definition: | The time elapsed (in days) for a patient on the elective surgery waiting list from the date they were added to the waiting list for the procedure to the date they were removed from the waiting list. | |
| Context: | <p>Elective surgery:</p> <p>This is a critical elective surgery waiting times data element. It is used to determine whether patients were overdue, or had extended waits when they were removed from the waiting list. It is used to assist doctors and patients in making decisions about hospital referral, to assist in the planning and management of hospitals and in health care related research.</p> | |

Relational and Representational Attributes

| | |
|---------------------------------|--------------------|
| Datatype: | Numeric |
| Representational form: | Quantitative value |
| Representational layout: | NNNN |
| Minimum size: | 1 |
| Maximum size: | 4 |

Data domain: Count in number of days.

Guide for use:

The number of days is calculated by subtracting the Listing date for care from the Removal date, minus any days when the patient was 'not ready for care', and also minus any days the patient was waiting with a less urgent clinical urgency category than their clinical urgency category at removal.

Days when the patient was not ready for care is calculated by subtracting the date(s) the person was recorded as 'not ready for care' from the date(s) the person was subsequently recorded as again being 'ready for care'.

If, at any time since being added to the waiting list for the elective surgical procedure, the patient has had a less urgent clinical urgency category than the category at removal, then the number of days waited at the less urgent clinical urgency category should be subtracted from the total number of days waited.

In cases where there has been only one category reassignment (i.e. to the more urgent category attached to the patient at removal) the number of days at the less urgent clinical urgency category should be calculated by subtracting the Listing date for care from the Category reassignment date. If the patient's clinical urgency was reclassified more than once, days spent in each period of less urgent clinical urgency than the one applying at removal should be calculated by subtracting one Category reassignment date from the subsequent Category reassignment date, and then adding the days together.

When a patient is removed from an elective surgery waiting list, for admission on an elective basis for the procedure they were awaiting, but the surgery is cancelled and the patient remains on or is placed back on the waiting list within the same hospital, the time waited on the list should continue.

Therefore at the removal date the patient's waiting time includes the number of days waited on an elective surgery waiting list, both before and after any cancelled surgery admission. The time waited before the cancelled surgery should be counted as part of the total time waited by the patient.

Verification rules:**Collection methods:****Related metadata:**

is calculated using Category reassignment date vers 2
 is qualified by Clinical urgency vers 2
 is used in the derivation of Extended wait patient vers 1
 is calculated using Listing date for care vers 4
 is used in the derivation of Overdue patient vers 3
 is qualified by Patient listing status vers 3
 is calculated using Removal date vers 1
 supersedes previous derived data element Waiting time at admission vers 1

Administrative Attributes**Source document:**

Source organisation: Australian Institute of Health and Welfare
 National Health Data Committee

Information model link:

NHIM Performance indicator

Data Set Specifications:

NMDS - Elective surgery waiting time

Start date

End date

01/07/2002

Comments:

Elective surgery waiting times data collections include measures of waiting times at removal and at designated census dates. This data element is used to measure waiting times at removal whereas the data element Waiting time at Census Date measures waiting times at a designated census date.

The calculation of waiting times for patients, who are transferred from an elective surgery waiting list managed by one public acute hospital to another, will be investigated in the future. In this case, the amount of time waited on previous lists would follow the patient to the next. Therefore when the patient is removed from the waiting list (for admission or other reason), their waiting time would include the total number of days on all lists (less days not ready for care and days in lower urgency categories).

Weight – measured

Identifying and Definitional Attributes

Knowledgebase ID: 000365 **Version No:** 2

Metadata type: Data Element

Admin. status: Current
01/01/03

Definition: A person's measured weight (body mass).
In order to ensure consistency in measurement, the measurement protocol described under Collection methods should be used.

Context: Public health, health care and clinical settings:
Weight is an overall measure of body size that does not distinguish between fat and muscle. Weight is an indicator of nutritional 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 in adults is of interest because it is an indicator of changing health status, and in children as it indicates changing health status and growth and development. It enables the calculation of body mass index (BMI) which requires the measurement of height and weight for adults as well as sex and date of birth for children and adolescents.

Relational and Representational Attributes

Datatype: Numeric

Representational form: Quantitative value

Representational layout: NNN.N

Minimum size: 4

Maximum size: 5

Data domain: Measurement of weight in kilograms to one decimal place
999.9 Not able to be collected

Guide for use:

Verification rules:

Collection methods: The collection of anthropometric measurements, particularly in those who are overweight or obese or who are concerned about their weight, should be performed with great sensitivity and without drawing attention to an individual's weight.

Measurement protocol:

Weight – measured is a continuous variable measured to the nearest 0.1 kg.

Equipment used should be described and reported. Scales should have a resolution of at least 0.1 kg and should have the capacity to weigh up to at least 200 kg. Measurement intervals and labels should be clearly readable under all conditions of use of the instrument. Scales should be capable of being calibrated across the entire range of measurements. Precision error should be no more than 0.1 kg. Scales should be calibrated on each day of use. Manufacturers' guidelines should be followed with regard to the transportation of the scales.

Adults and children who can stand:

The subject stands over the centre of the weighing instrument, with the body weight evenly distributed between both feet.

Heavy jewellery should be removed and pockets emptied. Light indoor clothing can be worn, excluding shoes, belts, and sweater. Any variations from light indoor clothing (e.g. heavy clothing, such as kaftans or coats worn because of cultural practices) should be noted on the data collection form. Adjustments for non-standard clothing (i.e. other than light indoor clothing) should only be made in the data checking/cleaning stage prior to data analysis.

If the subject has had one or more limbs amputated, record this on the data collection form and weigh them as they are. If they are wearing an artificial limb, record this on the data collection form but do not ask them to remove it. Similarly, if they are not wearing the limb, record this but do not ask them to put it on.

The measurement is recorded to the nearest 0.1 kg. If the scales do not have a digital readout, take a repeat measurement. If the two measurements disagree by more than 0.5 kg, then take a third measurement. All raw measurements should be recorded on the data collection form. If practical, it is preferable to enter the raw data into the database as this enables intra-observer and, where relevant, inter-observer errors to be assessed. The subject's measured weight is subsequently calculated as the mean of the two observations, or the mean of the two closest measurements if a third is taken, and recorded on the form. If only a mean value is entered into the database then the data collection forms should be retained.

It may be necessary to round the mean value to the nearest 0.1 kg. If so, rounding should be to the nearest even digit to reduce systematic over reporting (Armitage & Berry 1994). For example, a mean value of 72.25 kg would be rounded to 72.2 kg, while a mean value of 72.35 kg would be rounded to 72.4 kg.

Infants:

Birth weight and gender should be recorded with gestational age. During infancy a levelled pan scale with a bean and movable weights or digital scales capable of measuring to two decimal places of a kilogram are acceptable. Birth weight should be determined within 12 hours of birth. The infant, with or without a nappy or diaper is placed on the scales so that the weight is distributed equally about the centre of the pan. When the infant is lying or suspended quietly, weight is recorded to the nearest 10 grams. If the nappy or diaper is worn, its weight is subtracted from the observed weight, i.e. reference data for infants are based on nude weights.

Validation and quality control measures:

If practical, equipment should be checked daily using one or more objects of known weight in the range to be measured. It is recommended that the scale be calibrated at the extremes and in the mid range of the expected weight of the population being studied.

Within- and, if relevant, between-observer variability should be reported. They can be assessed by the same (within -) or different (between-) observers repeating the measurement of weight, on the same subjects, under standard conditions after a short time interval. The standard deviation of replicate measurements (technical error of measurement) between observers should not exceed 0.5 kg and be less than 0.5 kg within observers.

Extreme values at the lower and upper end of the distribution of measured height should be checked both during data collection and after data entry. Individuals should not be excluded on the basis of true biological difference.

Last digit preference, and preference or avoidance of certain values, should be analysed in the total sample and (if relevant) by observer, survey site and over time if the survey period is long.

Related metadata: supersedes previous data element Adult weight – measured vers 1
is used in the calculation of Body mass index vers 2
is used in conjunction with Creatinine serum – measured vers 1

Administrative Attributes

Source document: The measurement protocol described below is that recommended by the World Health Organization (WHO Expert Committee 1995).

Source organisation: World Health Organization

Information model link:

NHIM Physical characteristic

| Data Set Specifications: | Start date | End date |
|---|-------------------|-----------------|
| DSS - Cardiovascular disease (clinical) | 01/01/2003 | |
| DSS - Diabetes (clinical) | 01/01/2003 | |

Comments: This data element applies to persons of all ages. It is recommended for use in population surveys and health care settings.

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. However 5-year age groups are not generally suitable for children and adolescents. 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, women, children and adolescents, although the range will depend on the population.

Wt < 10 kg
10 kg = Wt < 15 kg
15 kg = Wt < 20 kg
... in 5 kg categories
135 kg = Wt < 140 kg
Wt => 140 kg

Source organisation: WHO and the consortium to develop standard methods for the collection and collation of anthropometric data in children as part of the National Food and Nutrition Monitoring and Surveillance Project, funded by the Commonwealth Department of Health and Ageing.

DSS - Diabetes (clinical):

Following Principles of Care and Guidelines for the Clinical Management of Diabetes Mellitus, BMI should be below 27 kg/m² for men and women. For adults who suffer from diabetes, the recommendation is to measure weight and calculate BMI on the initial visit and then measure weight every 3 months. If the patient is on a weight reduction program, weight is to be measured more frequently.

Strong evidence exists that weight loss reduces blood pressure in both overweight hypertensive and non-hypertensive individuals; reduces serum triglycerides and increases high-density lipoprotein (HDL)-cholesterol; and generally produces some reduction in total serum cholesterol and low-density lipoprotein (LDL)-cholesterol.

The risk of developing diabetes rises continuously with increasing obesity (DHAC & AIHW 1999:13). An increased central distribution of body fat (when fatness is concentrated in the abdomen) also appears to be associated more often with Type 2 diabetes (Bishop et al. 1998:430-1).

Weight loss reduces blood glucose levels in overweight and obese persons with and without diabetes; and weight loss also reduces blood glucose levels and HbA1c in some patients with type 2 diabetes. Although there have been no prospective trials to show changes in mortality with weight loss in obese patients, reductions in risk factors would suggest that development of type 2 diabetes and CVD would be reduced with weight loss.

References:

Clinical Guidelines on the Identification, Evaluation and Treatment of Overweight and Obesity in Adults (US National Heart, Lung and Blood Institute (NHLBI) in cooperation with the National Institute of Diabetes and Digestive and Kidney Diseases).

Chronic Diseases and Associated Risk Factors in Australia 2001 (AIHW).

Weight – self-reported

Identifying and Definitional Attributes

| | | | |
|--------------------------|--|--------------------|---|
| <i>Knowledgebase ID:</i> | 000366 | <i>Version No:</i> | 2 |
| <i>Metadata type:</i> | Data Element | | |
| <i>Admin. status:</i> | Current | | |
| | 01/01/03 | | |
| <i>Definition:</i> | A person's self-reported weight (body mass). | | |

| | |
|-----------------|---|
| <i>Context:</i> | 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

| | |
|---------------------------------|------------------------|
| <i>Datatype:</i> | Numeric |
| <i>Representational form:</i> | Quantitative value |
| <i>Representational layout:</i> | NNN |
| <i>Minimum size:</i> | 2 |
| <i>Maximum size:</i> | 3 |
| <i>Data domain:</i> | Recorded in kilograms. |
| | 888 Unknown |
| | 999 Not stated |

Guide for use:

Verification rules:

| | |
|----------------------------|---|
| <i>Collection methods:</i> | 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 vers 1
is used in the calculation of Body mass index vers 2

Administrative Attributes

Source document:

Source organisation: National Health Data Committee
National Centre for Monitoring Cardiovascular Disease
Australian Institute of Health and Welfare

Information model link:

NHIM Physical characteristic

Data Set Specifications: **Start date** **End date**

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.

Year insulin started

Identifying and Definitional Attributes

| | | |
|--------------------------|---|----------------------|
| Knowledgebase ID: | 000848 | Version No: 1 |
| Metadata type: | Data Element | |
| Admin. status: | Current | |
| | 01/01/03 | |
| Definition: | The year the patient started insulin injections. | |
| Context: | Public health, health care and clinical settings. | |

Relational and Representational Attributes

| | |
|---------------------------------|---|
| Datatype: | Numeric |
| Representational form: | Date |
| Representational layout: | YYYY |
| Minimum size: | 4 |
| Maximum size: | 4 |
| Data domain: | Actual year insulin was started. 9999 Not stated/inadequately described |
| Guide for use: | Record the year that insulin injections were started. This data element has to be completed for all patients who use insulin. It is used to cross check diabetes type assignment. |
| Verification rules: | |
| Collection methods: | Ask the individual the year when he/she started to use insulin. Alternatively obtain this information from appropriate documentation, if available. |
| Related metadata: | relates to the data element Date of birth vers 4 relates to the data element Diabetes status vers 1 relates to the data element Diabetes therapy type vers 1 relates to the data element Year of diagnosis of diabetes mellitus vers 1 |

Administrative Attributes

| | | | |
|---------------------------------|---|-----------------|--|
| Source document: | National Diabetes Outcomes Quality Review Initiative (NDOQRIN) data dictionary. | | |
| Source organisation: | National Diabetes Data Working Group | | |
| Information model link: | NHIM Request for/entry into service event | | |
| Data Set Specifications: | Start date | End date | |
| DSS - Diabetes (clinical) | 01/01/2003 | | |
| Comments: | This data element provides information about the duration of diabetes in individual patients. | | |

Insulin is a regulating hormone secreted into the blood in response to a rise in concentration of blood glucose or amino acids. It is a double-chain protein hormone formed from proinsulin in the beta cells of the pancreatic islets of Langerhans. Insulin promotes the storage of glucose and the uptake of amino acids, increases protein and lipid synthesis, and inhibits lipolysis and gluconeogenesis.

Commercially prepared insulin is available in various types, which differ in the speed they act and in the duration of their effectiveness.

Year of diagnosis of diabetes mellitus

Identifying and Definitional Attributes

| | | |
|--------------------------|--|----------------------|
| Knowledgebase ID: | 000849 | Version No: 1 |
| Metadata type: | Data Element | |
| Admin. status: | Current | |
| | 01/01/03 | |
| Definition: | The year a patient was first diagnosed as having diabetes. | |
| Context: | Public health, health care and clinical settings. | |

Relational and Representational Attributes

| | |
|---------------------------------|--|
| Datatype: | Numeric |
| Representational form: | Date |
| Representational layout: | YYYY |
| Minimum size: | 4 |
| Maximum size: | 4 |
| Data domain: | Actual year of diagnosis of diabetes mellitus 9999 Not stated/inadequately described |
| Guide for use: | Record the year that the patient was first diagnosed as having diabetes. |
| Verification rules: | |
| Collection methods: | Ask the individual the year when he/she was diagnosed with diabetes. Alternatively obtain this information from appropriate documentation, if available. |
| Related metadata: | relates to the data element Date of birth vers 4 relates to the data element Year insulin started vers 1 |

Administrative Attributes

| | | |
|---------------------------------|---|-----------------|
| Source document: | National Diabetes Outcomes Quality Review Initiative (NDOQRIN) data dictionary. | |
| Source organisation: | National Diabetes Data Working Group | |
| Information model link: | NHIM Request for/entry into service event | |
| Data Set Specifications: | Start date | End date |
| DSS - Diabetes (clinical) | 01/01/2003 | |
| Comments: | Long-term complications of diabetes mellitus affect the eyes, kidneys, nerves, and blood vessels. | |