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## Major revisions for 2013 birth outcomes

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Major revisions for 2013 birth outcomes

New data items

**CorrAgeMth**  Corrected age in months

Modified data items

**DateOfAssess**  Date Assessed
**RespSprt**  Respiratory Support at the time of follow-up assessment
**GQ**  General Quotient (Griffiths)
**OthScore**  Score of other developmental tests
**OtherDis**  Other disabilities
**OtherDisDesc**  Description of other disabilities

Discontinued data items

None
2013 Data Dictionary
Registration criteria for high-risk neonates

Admin status: CURRENT 01/01/2009

Identifying and definitional attributes

Knowledgebase ID: Version number:

Data element type: DATA ELEMENT CONCEPT

Definition: All live born babies who are admitted to a participating hospital at less than 28 days, or who are transferred from a labour ward with the intention of admission to the unit who are also:
  - Born less than 28 completed weeks' gestation, or
  - Less than 1000 grams birth weight,

Context: High-risk babies admitted for intensive care.

Guide for use: This applies only to the first hospitalisation of the baby. If the baby is born at home, the first hospitalisation commences on admission to hospital for the first time.

Administrative attributes

Source organisation: ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection
Establishment Number

**Admin status:** CURRENT 01/01/2009

**Identifying and definitional attributes**

- **Knowledgebase ID:** 000377
- **Version number:** 2

**Metadata type:** DATA ELEMENT

**Definition:** An identifier for establishment, unique within the state or territory.

**Context:**
- Admitted patient care:
- Admitted patient palliative care:
- Admitted patient mental health care:
- Alcohol and other drug treatment services:
- Emergency department waiting times:
- Perinatal:
- Public hospital establishment:

**Relational and representational attributes**

- **Data type:** Numeric
- **Field size:** Min. 6 Max. 12
- **Layout:** NNNNNNNNNNNN

**Data domain:** Valid establishment number.

**Guide for use:** A unique number, but not the medical record number, which identifies each baby in the cohort for which data is submitted. This should be an exact match with the BabyCODE originally submitted by the registration hospital for the corresponding neonatal dataset.

**Administrative attributes**

- **Source organisation:** National Health Data Committee. National Minimum data set: Perinatal

**Comments:** This data element supports the provision of unit record and / or summary data by State and Territory health authorities as part of the Emergency Department Waiting Time National Minimum Data Set.

**ANZNN label — ‘BabyCODE’**
Date of birth

Admin status: CURRENT 01/01/2009

Identifying and definitional attributes

Knowledgebase ID: 00036  Version number: 1

Metadata type: DATA ELEMENT

Definition: Date of birth of the child.

Context: Required to derive age for demographic analyses, for analysis by age at a point of time and for use to derive Diagnosis Related Group (admitted patients). This also assists in the unique identification of babies as ANZNN has de-identified data, and required for the derivation of other data elements

Relational and representational attributes

Data type: Numeric  Field size: Min. 10 Max. 10  Layout: DD/MM/YYYY

Data domain: Valid dates

Guide for use: If the date of birth is not known provision should be made to collect age (in years) and a date of birth derived from age.

Verification rules: For the provision of State and Territory hospital data to Commonwealth agencies this field must:
- Not be null
- Be consistent with diagnoses and procedure codes, for records to be grouped, otherwise resulting in fatal error.

Administrative attributes

Source organisation: ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection

ANZNN label — ‘DOB’
**Sex**

**Admin status:** CURRENT 01/01/2009

**Identifying and definitional attributes**

**Knowledgebase ID:** 000149  **Version number:** 1

**Metadata type:** DATA ELEMENT

**Definition:** The sex of the child.

**Context:** Required for analyses of service utilisation, needs for services and epidemiological studies.

**Relational and representational attributes**

**Data type:** Numeric  **Field size:** Min. 1 Max. 2  **Layout:** NN

**Data domain:**

0  **Unknown** – information not available
1  **Male**
2  **Female**
3  **Ambiguous** – or indeterminate

**Guide for use:** An indeterminate sex category may be necessary for situations such as the classification of perinatal statistics when it is not possible for the sex to be determined.

**Administrative attributes**


**Source organisation:** ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection

**ANZNN label — ‘SEX’**
**Date Assessed**

*Admin status:* CURRENT  01/01/2013

**Identifying and definitional attributes**

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

**Metadata type:** DATA ELEMENT

**Definition:** Date on which the assessment was performed.

**Context:** The age at which the developmental assessment (e.g. Bayley or Griffiths) is performed is critical in determining the corrected age of the infant and impacts on the scores achieved. The medical assessment is relatively age independent. Enter date of Bayley assessment if carried out at corrected age 18-42 months, with a target range of 24-36 months, or date of other test if no Bayley assessment. If more than one assessment was carried out using the same instrument, enter date from the latest assessment. If a formal assessment could not be carried out but other developmental information was obtained, enter this date.

**Relational and representational attributes**

**Data type:** Numeric  
**Field size:** Min. 10 Max. 10  
**Layout:** DD/MM/YYYY

**Data domain:** Valid dates

**Related metadata:**
Supersedes previous ‘Date Assessed’ – version 1  01/01/2009

**Administrative attributes**

**Source Organisation:** ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection

**ANZNN label — ‘DateOfAssess’**
**Corrected age in months**

**Admin status:** CURRENT 01/01/2013

**Identifying and definitional attributes**

**Knowledgebase ID:**  
**Version number:**

**Metadata type:** DERIVED DATA ELEMENT

**Definition:** Age in months corrected for prematurity based on the age the child would be if the pregnancy had gone to term (40 weeks)

**Context** Assessment of growth and development should be based on age which has been corrected for prematurity.

**Relational and representational attributes**

**Data type:** Numeric  
**Field size:** Min. 2 Max. 3  
**Layout:** NN.N

**Data domain:** Number representing the number of months to one decimal place, or 99 for not stated / unknown.

**Guide for use:**
The age when performance is no longer influenced by prematurity and the need to use corrected age is controversial. However objective evidence supports the need to make this allowance up to approximately 8 years of age.

To calculate corrected age in months use the formula:

\[(\text{Date Assessed} - \text{Estimated Date of Confinement}) / (365.25 / 12)\]

**Administrative attributes**

**Source document:**

**Source organisation:** ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection

**ANZNN label — ‘CorrAgeMth’**
Outcome for children at two to three years

Admin status: CURRENT 01/01/2009

Identifying and definitional attributes

Knowledgebase ID: Version number:

Relational and representational attributes

Metadata type: DATA ELEMENT

Definition: Survival of the child at two to three years corrected age, as represented by a code.

Context: High-risk babies admitted for intensive care aged between two and three years

Relational and representational attributes

Data type: Numeric Field size: Min. 1 Max. 2 Layout: NN

Data Domain:

0  No, child died after discharge from hospital to home and prior to the two to three year follow-up
-1  Yes, survived to the two to three year follow-up
99  Unknown - Outcome is unknown

Guide for use: Only one outcome to be used.

Administrative attributes

Source organisation: ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection.

ANZNN Label — ‘Outcm2or3’
Outcome for follow up at two to three years:

**Admin status:** CURRENT 01/01/2011

**Identifying and definitional attributes**

Knowledgebase ID: Version number: 3

**Relational and representational attributes**

**Metadata type:** DATA ELEMENT

**Definition:** Outcome of the child for follow-up at two to three years of age, as represented by a code.

**Context:** High-risk babies admitted for intensive care aged between two and three years.

**Relational and representational attributes**

**Data type:** Numeric  
**Field size:** Min. 1 Max. 1  
**Layout:** N

**Data Domain:**

1. **Formal developmental assessment** (e.g. Bayley III or Griffiths)
2. **Information obtained** but a formal assessment not done
3. **Child is unable to be assessed** due to severe developmental delay
4. **Child is unable to be assessed** due to behavioural disorder
5. **Child is unable to be assessed** due to non-compliance
6. **Lost** - the child has been lost to follow-up

**Guide for use:** Only one outcome to be used.

If the child attended assessment but was uncooperative, record as “Child is unable to be assessed due to non-compliance (5)”

If no contact with the child’s parent(s)/guardian(s) could be made or if the child’s parent(s)/guardian(s) were unwilling or unable to bring the child in for assessment, record as “Lost- the child has been lost to follow-up (6)”

**Related metadata:**

Supersedes previous ‘Outcome for follow up at two or three years’ – version 1 01/01/2009
Supersedes previous ‘Outcome for follow up at two or three years’ – version 2 01/01/2010

**Administrative attributes**

**Source organisation:** ANZNN Advisory Council; complies with NSW Neonatal Intensive Care Units Data Collection.

**ANZNN label — ‘Outcmfup’**
Weight

Admin status: CURRENT 01/01/2009

Identifying and definitional attributes

Knowledgebase ID: 269197  Version number: 1

Metadata type: DATA ELEMENT

Definition: The weight (body mass) of a child measured in kilograms.

Context: Person- weight

Relational and representational attributes

Data type: Numeric  Field size: Min. 2 Max. 4  Layout: N (NN).N

Data domain: 2 - 4 digit numbered field representing the weight in kilograms (kg). If value is unknown or missing use 99.

Guide for use:
In order to ensure consistency in measurement, the measurement protocol described under Collection methods should be used. If the weight of the child was measured either side of one month of the date of assessment then an extrapolated value should be provided as determined by the z-score.

Collection methods: Equipment used should be described and reported. Scales should have a resolution of at least 0.1kg 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 0.1kg. Scales should be calibrated on each day of use. Manufacturers’ guidelines should be followed with regard to the transportation of the scales.

Administrative attributes

Source Document: AIHW National Health Data Dictionary (NHDD) Version 14

Source organisation: ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection.

ANZNN label — ‘Weight’
Type of stature measurement

Admin status: CURRENT 01/01/2011

Identifying and definitional attributes

Knowledgebase ID: 270361  Version number: 1

Metadata type: DATA ELEMENT

Definition: The type of stature measurement used at the two to three year follow-up assessment

Context: Public health and health care

Relational and representational attributes

Data type: Numeric  Field size: Min. 1 Max. 2  Layout: NN

Data domain:

1  Standing height
2  Recumbent length
99  Unknown

Related metadata:
Supersedes ‘Height (measured)’ – version 1 01/01/2009
Supersedes ‘Length’ – version 1 01/01/2009

Administrative attributes

Source document: AIHW National Health Data Dictionary (NHDD) Version 14

Source organisation: ANZNN Advisory Council; complies with NSW Neonatal Intensive Care Units Data Collection.

ANZNN label — ‘StatureType’
Stature

Admin status: CURRENT 01/01/2011

Identifying and definitional attributes

Knowledgebase ID: Version number: 1

Metadata type: DATA ELEMENT

Definition: The stature of a child measured in centimetres.

Context: Public health and health care.

Relational and representational attributes

Data type: Numeric  Field size: Min. 2 Max. 4  Layout: NN (N).N

Data domain: 2 - 4 digit numbered field representing stature in centimetres. If value is unknown or missing use 999.

Guide for use: Measurements of stature should be assessed in relation to children and adolescents’ age and pubertal status. If the stature of the child was measured either side of one month of the date of assessment then an extrapolated value should be provided as determined by the z-score.

Measurement protocol:

Height: The measurement of height requires a vertical metric rule, a horizontal headboard, and a non-compressible flat even surface on which the subject stands. The equipment may be fixed or portable, and should be described and reported. The graduations on the metric rule should be at 0.1 cm intervals, and the metric rule should have the capacity to measure up to at least 210 cm. Measurement intervals and labels should be clearly readable under all conditions of use of the instrument.

Length: For the measurement of supine length of children up to 3 years of age, two observers are required. One observer positions the head correctly while the other ensures the remaining position is correct and brings the measuring board in contact with the feet. The subject lies in a supine position on a recumbent length table or measuring board. The crown of the head must touch the stationary, vertical headboard. The subject’s head is held with the line of vision aligned perpendicular to the plane of the measuring surface. The shoulders and buttocks must be flat against the table top, with the shoulders and hips aligned at right angles to the long axis of the body. The legs must be extended at the hips and knees and lie flat against the table top and the arms rest against the sides of the trunk. The measurer must ensure that the legs remain flat on the table and must shift the movable board against the heels. In infants care has to be taken to extend the legs gently. In some older children two observers may also be required.

Related metadata:
Supersedes 'Height (measured)' – version 1 01/01/2009
Supersedes 'Length' – version 1 01/01/2009

Administrative attributes

Source document: AIHW National Health Data Dictionary (NHDD) Version 14

Source organisation: ANZNN Advisory Council; complies with NSW Neonatal Intensive Care Units Data Collection

ANZNN label — ‘Stature’
Head Circumference

Admin status: CURRENT 01/01/2009

Identifying and definitional attributes

Knowledgebase ID: Version number: 1

Metadata type: DATA ELEMENT

Definition: The head circumference of a child aged between two and three years measured in centimetres.

Context: Public health and health care

Relational and representational attributes

Data type: Numeric Field size: Min. 3 Max. 4 Layout: NN (N).N

Data domain: 3 - 4 digit numbered field representing the head circumference in centimetres. If value is unknown or missing use 99.

Guide for Use: If the stature of the child was measured either side of one month of the date of assessment then an extrapolated value should be provided as determined by the z-score

Measurement protocol: The measurement of head circumference requires a narrow (7 mm wide), flexible, inelastic tape measure. 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.

Administrative attributes

Source organisation: ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection.

ANZNN label — ‘HC’
**Hearing Aid**

*Admin status:* CURRENT 01/01/2009

**Identifying and definitional attributes**

**Knowledgebase ID:** Version number: 1

**Metadata type:** DATA ELEMENT

**Definition:** Hearing aid has been prescribed or not. Information as provided by parent or carer at the two to three year follow-up assessment.

**Context:** High-risk babies admitted for intensive care aged two to three years.

**Relational and representational attributes**

**Data type:** Numeric  
**Field size:** Min. 1 Max. 2  
**Layout:** NN

**Data domain:**

0  No hearing aid prescribed  
1  Unilateral hearing aid prescribed  
2  Bilateral hearing aid prescribed  
99  Unknown

**Administrative attributes**

**Source organisation:** ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection.

**ANZNN label — ‘Hearaid’**
Cochlear Implant

Admin status: CURRENT 01/01/2011

Identifying and definitional attributes

Knowledgebase ID: Version number: 2

Metadata type: DATA ELEMENT

Definition: Cochlear Implant has been inserted or not. Information as provided by parent or carer at the two to three year follow-up assessment.

Context: High-risk babies admitted for intensive care aged two to three years.

Relational and representational attributes

Data type: Numeric  
Field size: Min. 1 Max. 2  
Layout: NN

Data domain:

0  No cochlear implant
-1  Yes, cochlear implant
99  Unknown

Related metadata:
Supersedes previous ‘Cochlear implant’ version 1 01/01/2009

Administrative attributes

Source organisation: ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection.

ANZNN label — ‘CochImplt’
Blind

Admin status: CURRENT 01/01/2011

Identifying and definitional attributes

Knowledgebase ID: Version number: 3

Metadata type: DATA ELEMENT

Definition: Ophthalmologist assessment has demonstrated that the child has blindness (<6/60 in better eye). This information may be provided by the parent or carer at the two to three year follow-up assessment.

Context: High-risk babies admitted for intensive care aged two to three years.

Relational and representational attributes

Data type: Numeric Field size: Min. 1 Max. 2 Layout: NN

Data domain:

0 No Blindness
-1 Yes, Blindness (<6/60 in better eye)
99 Vision status is unknown

Related metadata:
Supersedes previous ‘Blind’ – version 1 01/01/2009
Supersedes previous ‘Blind’ – version 2 01/01/2010

Administrative attributes

Source organisation: ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection.

ANZNN label — ‘Blind’
Respiratory support at the time of follow-up assessment

Admin status: CURRENT 01/01/2013

Identifying and definitional attributes

Knowledgebase ID: Version number: 3

Metadata type: DATA ELEMENT

Definition: At the time of the two to three year follow-up assessment, the type of therapy the child is receiving for respiratory disease, as represented by a code.

Context: High-risk babies admitted for intensive care aged two to three years.

Relational and representation attributes

Data type: Numeric  Field size: Min. 1 Max. 2  Layout: NN

Data domain:

0  No respiratory support
1  Continued Ventilator Support
2  Oxygen
3  Ever had tracheostomy post-discharge
99  Unknown

Related metadata:
Supersedes previous 'Respiratory support at time of follow-up assessment' – version 1 01/01/2009
Supersedes previous 'Respiratory support at time of follow-up assessment' – version 2 01/01/2010

Administrative attributes

Source organisation: ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection.

ANZNN label — ‘RespSprt’
Gastrointestinal feeding

Admin status: CURRENT 01/01/2009

Identifying and definitional attributes

Knowledgebase ID: Version number: 1

Metadata type: DATA ELEMENT

Definition: At the time of the two to three year follow-up assessment, the therapy the child requires for gastrointestinal disease, represented by a code.

Context: High-risk babies admitted for intensive care aged two to three years.

Relational and representational attributes

Data type: Numeric  Field size: Min. 1 Max. 2  Layout: NN

Data domain:

0  No therapy
1  Nasogastric tube (NGT)
2  Parenteral nutrition (PN)
3  Percutaneous endoscopic gastrostomy (PEG) feeding
99  Unknown

Administrative attributes

Source organisation: ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection.

ANZNN label — ‘GITfeed’
**Cerebral Palsy**

*Admin status:* CURRENT 01/01/2011

**Identifying and definitional attributes**

Knowledgebase ID: Version number: 1

**Metadata type:** DATA ELEMENT

**Definition:** Cerebral palsy diagnosed.

**Context:** High-risk babies admitted for intensive care aged two to three years.

**Relational and representational attributes**

**Data type:** Numeric  
**Field size:** Min. 1 Max. 2  
**Layout:** NN

**Data domain:**

- 0 No cerebral palsy
- 1 Yes, cerebral palsy
- 99 Unknown

**Related metadata:**

Supersedes ‘Type of Cerebral Palsy’ – version 1 01/01/2009  
Supersedes ‘Type of Cerebral Palsy’ – version 2 01/01/2010

**Administrative attributes**

**Source organisation:** ANZNN Advisory Council; complies with NSW Neonatal Intensive Care Units Data Collection and the Australian Cerebral Palsy Register

ANZNN label — ‘CP’
Gross Motor Function Classification System for Cerebral Palsy (GMFCS) (2-4 years)

Admin status: CURRENT 01/01/2009

Identifying and definitional attributes

Knowledgebase ID: Version number: 1

Metadata type: DATA ELEMENT

Definition: The Gross Motor Function Classification System (GMFCS) classifies the movement ability of children with cerebral palsy. The Gross Motor Function Classification System (GMFCS) for cerebral palsy is based on self-initiated movement, with emphasis on sitting, transfers, and mobility, as represented by a code.

Context: High-risk babies admitted for intensive care aged between two to three years.

Relational and representational attributes

Data type: Numeric Field size: Min. 1 Max. 1 Layout: N

Data domain:

1 LEVEL 1: Children floor sit with both hands free to manipulate objects. Movements in and out of floor sitting and standing are performed without adult assistance. Children walk as the preferred method of mobility without the need for any assistive mobility device.

2 LEVEL II: Children floor sit but may have difficulty with balance when both hands are free to manipulate objects. Movements in and out of sitting are performed without adult assistance. Children pull to stand on a stable surface. Children crawl on hands and knees with a reciprocal pattern, cruise holding onto furniture and walk using an assistive mobility device as preferred methods of mobility.

3 LEVEL III: Children maintain floor sitting often by “W-sitting” (sitting between flexed and internally rotated hips and knees) and may require adult assistance to assume sitting. Children creep on their stomach or crawl on hands and knees (often without reciprocal leg movements) as their primary methods of self-mobility. Children may pull to stand on a stable surface and cruise short distances. Children may walk short distances indoors using a hand-held mobility device (walker) and adult assistance for steering and turning.

4 LEVEL IV: Children floor sit when placed, but are unable to maintain alignment and balance without use of their hands for support. Children frequently require adaptive equipment for sitting and standing. Self-mobility for short distances (within a room) is achieved through rolling, creeping on stomach, or crawling on hands and knees without reciprocal leg movement.

5 LEVEL V: Physical impairments restrict voluntary control of movement and the ability to maintain antigravity head and trunk postures. All areas of motor function are limited. Functional limitations in sitting and standing are not fully compensated for through the use of adaptive equipment and assistive technology. At Level V, children have no means of independent movement and are transported. Some children achieve self-mobility using a powered wheelchair with extensive adaptations.
Administrative attributes

**Source document:** R Palisano, P Rosenbaum, D Bartlett, M Livingston, GMFCS- E & R © CanChild Centre for Childhood Disability Research, McMaster University (Reference: Dev Med Child Neurol 1997;39:214-223)

**Source organisation:** ANZNN Advisory Committee; Complies with NSW Neonatal Intensive Care Units Data Collection.

ANZNN label — ‘GMFCS’
Bayley Scales of Infant and Toddler Development - third edition

Admin status: CURRENT 01/01/2011

Identifying and definitional attributes

Knowledgeable ID: Version number: 2


Context: High risk babies that have been admitted for intensive care and aged between two to three years

Relational and representational attributes

Data type: Numeric    Field size: Min. 1 Max.2

Data domain:

0  No Bayley-III assessment performed
-1  Yes, Bayley-III assessment performed
99  Unknown

ANZNN label ─ ‘BayleyDevTest’

Bayley scales of infant and toddler development III subtests

Cognitive Scale: Assesses the sensory motor development, exploration and manipulation, object relatedness, concept formation, memory and other aspects of cognitive processing.

- Composite Score*

ANZNN label ─ ‘CognComp’

Language Scale

Receptive communication: Includes items that assess preverbal behaviours, vocabulary development, such as being able to identify objects and pictures that are referenced; vocabulary related to morphological development, such as pronouns and prepositions; and understanding of morphological markers, such as plural –s, tense markings (-ing, -ed) and the possessive –’s.

- Scaled Score*

ANZNN label ─ ‘ResScale’
Expressive communication: includes items that assess preverbal communication, such as babbling, gesturing, joint referencing, and turn taking, vocabulary development such as naming objects, pictures and attributes (e.g. colour and size); and morpho-syntactic development, such as using two-word utterances, plurals and verb tense.

- Scaled Score*

**ANZNN Label — ‘ExpScale’**

**SUM:** Is the sum of the receptive communication score and the expressive communication score. This sum is then used to calculate the composite score and percentile rank for the language scale.

- Composite Score*

**ANZNN label — ‘LangSumComp’**

**Motor Scale**

**Fine Motor:** Fine motor skills are associated with prehension, perceptual-motor integration, motor planning, and motor speed are included in the fine motor subtest. Items measure young children’s skills related to visual tracking, reaching, object manipulation and grasping. Children’s functional hand skills and responses to tactile information are also measured.

- Scaled Score*

**ANZNN label — ‘FinMotScale’**

**Gross Motor:** primarily measures the movement of the limbs and torso. Items assess static positioning (e.g., sitting, standing); dynamic movement, including locomotion and coordination; balance; and motor planning

- Scaled Score*

**ANZNN label — ‘GrossMotScale’**

**SUM:** Is the sum of the fine motor score and the gross motor score. This sum is then used to calculate the composite score and percentile rank for the motor scale.

- Composite Score*

**ANZNN label — ‘MotSumComp’**
*Scaled scores* are derived from the subtest total raw scores and range from 1-19, with a mean of 10 and a standard deviation of 3.

*Composite scores* are derived from a various sums of subtest scaled scores. Composite scores are generated for language scale, motor scale and adaptive behaviour. These scores are scaled to a metric with a mean of 100 and a SD of 15 ranges from 40-160.

**Related metadata:**
Supersedes previous ‘Bayley Scales of infant and toddler development- third edition’ – version 1 01/01/2009

**Administrative attributes**

**Source document:** Bayley N 2006, Bayley scales of infant and toddler development Third Edition PsychCorp.

**Source Organisation:** ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection.
Griffiths Mental Development Scales (GMDS)

Admin status: CURRENT 01/01/2013

Identifying and definitional attributes

Knowledgeable ID: Version number: 3


Context: High risk babies that have been admitted for intensive care and aged between two to three years.

Relational and representational attributes

Data type: Numeric  Field size: min. 1 Max. 2  Layout: NN

Data domain:

0 No GMDS assessment performed
-1 Yes, GMDS assessment performed
99 Unknown

ANZNN label — ‘GMDS’

GMDS Subscales A-F

Locomotor Subscale (Subscale A): Examines the child’s gross motor skills including the child’s ability to balance, and to co-ordinate and control movements. Test items include age appropriate activities such as walking up and down stairs, kicking a ball, riding a bike, jumping and skipping.

- Subscale quotient*

ANZNN label — ‘LocoSubQuo’

Personal/ Social Subscale (Subscale B): Examines the child’s proficiency in the activities of daily living, level of independence and ability to interact with other children. Test items include age appropriate activities such as dressing and undressing, competency using cutlery and knowledge of information such as date of birth or address.

- Subscale quotient*

ANZNN Label — ‘PerSocSubQuo’
Language Subscale (Subscale C): examines the child’s receptive and expressive language. The test items include age appropriate items such as naming objects and colours, repeating sentences, describing a picture and answering a series of questions about comprehension/similarities/differences.
  - Subscale quotient*

ANZNN Label — ‘LangSubQuo’

Eye and hand co-ordination Subscale (Subscale D): Examines the child’s fine motor skills, manual dexterity and visual perception skills. The test items include age appropriate items such as threading beads, cutting with scissors, copying shapes and writing letters and numbers.
  - Subscale quotient*

ANZNN Label — ‘EyeHandSubQuo’

Performance Subscale (Subscale E): Examines the child’s manipulation skills including their speed of working and precision. The test items include age appropriate activities such as building bridges or stairs, completion of foam boards and pattern making
  - Subscale quotient*

ANZNN Label — ‘PerformSubQuo’

Practical Reasoning Subscale (Subscale F): Examines the child’s ability to solve practical problems and understand basic mathematical concepts and questions about moral and sequential issues. The test items include age appropriate activities such as counting and comparison of size, length and height. This subscale also assesses the child’s knowledge of the days of the week, ability to tell the time and understanding of right and wrong
  - Subscale quotient*

ANZNN Label — ‘PracReasSubQuo’

GENERAL QUOTIENT (GQ): Shows how the child’s total score varies around the total mean, with a mean of 100 and a standard deviation of 15.

ANZNN Label — ‘GQ’

*Subscale quotients: are used to interpret the child’s performance on individual subscales according to the qualitative descriptive categories provided in the GMDS technical manual. Consistently low performance on all subscales is indicative of a global developmental delay or significant learning difficulties. To calculate the quotient for each subscale use the formula:

\[
\text{Age Equivalent Score (from analysis manual)}/\text{Corrected Age at Assessment (months)} \times 100
\]
Related metadata:
Supersedes previous ‘Griffiths Mental Developmental Scales – extended revised (GMDS-ER)’ version 1 01/01/2009
Supersedes previous ‘Griffiths Mental Developmental Scales – extended revised (GMDS-ER)’ version 2 01/01/2011

Administrative attributes


Source Organisation: ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection.
Other Developmental Tests Administered

Admin status: CURRENT 01/01/2009

Identifying and definitional attributes

Knowledgebase ID: Version number: 1

Metadata type: DATA ELEMENT

Definition: Other developmental tests administered, including clinical developmental assessments. The Name of Test Administered is entered as ‘Clinical assessment’ in these cases.

Context: High-risk babies admitted for intensive care aged between two to three years.

Relational and representational attributes

Data type: Numeric Field size: Min. 1 Max. 2 Layout: NN

Data domain:

0 No other developmental tests administered
-1 Yes, other developmental tests administered
99 Unknown

Administrative attributes

Source organisation: ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection.

ANZNN label — ‘OthDevTests’
### Date of Test

**Admin status:** CURRENT  01/01/2009

**Identifying and definitional attributes**

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

**Metadata type:** DATA ELEMENT

**Definition:** Date on which the other development tests were administered.

**Context:** High-risk babies admitted for intensive care aged between two to three years.

**Relational and representational attributes**

**Data type:** Numeric  
**Field size:** Min. 10  
**Layout:** DD/MM/YYYY

**Data domain:** Valid dates

**Administrative attributes**

**Source organisation:** ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection

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**ANZNN label — ‘DateTest’**
Name of Test administered

**Admin status:** CURRENT 01/01/2009

**Identifying and definitional attributes**

**Knowledgebase ID:**

**Version number:**

**Metadata type:** DATA ELEMENT

**Definition:** The name of the other development tests administered.

**Context:** High-risk babies admitted for intensive care aged between two to three years.

**Relational and representational attributes**

**Data type:** Character **Field size:** Min. 10 Max. 100 **Layout:** CCCCC

**Data domain:** Free field representing developmental test name

**Administrative attributes**

**Source organisation:** ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection.

**ANZNN label — ‘NameTest’**
Subscales of other developmental tests

Admin status: CURRENT 01/01/2009

Identifying and definitional attributes

Knowledgebase ID: Version number: 1

Metadata type: DATA ELEMENT

Definition: Total number of the subscales for other developmental tests administered.

Context: High-risk babies admitted for intensive care aged between two to three years.

Relational and representational attributes

Data type: Numeric Field size: Min. 1 Max. 4 Layout: NNNN

Data domain: Number representing the total subscales of other developmental tests administered.

Related metadata: Use in conjunction with level of development (months).

Administrative attributes

Source organisation: ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection.

ANZNN label — ‘OthSubscales’
Score of other developmental tests

Admin status: CURRENT 01/01/2013

Identifying and definitional attributes

Knowledgebase ID: Version number: 2

Metadata type: DATA ELEMENT

Definition: Score of other developmental tests administered.

Context: High-risk babies admitted for intensive care aged between two to three years.

Relational and representational attributes

Data type: Character Field size: Min. 1 Max. 250 Layout: CCCCC

Data domain: Free field representing the score of other developmental tests administered.

Guide for use: See below table for score to be entered according to developmental test. If score is unknown record ‘unknown’.

<table>
<thead>
<tr>
<th>Developmental test</th>
<th>Score to be entered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wechsler Preschool and Primary Scale of Intelligence (WPPSI)- 3rd edition</td>
<td>Full scale intelligence quotient (FSIQ)</td>
</tr>
<tr>
<td>Bayley screening test</td>
<td>Risk-group category (low, moderate, high) for each subscale</td>
</tr>
<tr>
<td>Ages and stages Questionnaire</td>
<td>Above, near or below cut-off for each subscale</td>
</tr>
<tr>
<td>Movement ABC</td>
<td>Overall percentile rank</td>
</tr>
<tr>
<td>Carolina Curriculum</td>
<td>N/A- indicate level of development (months) in ‘OthlevDevlp’ data item</td>
</tr>
<tr>
<td>Neuro-sensory Motor Developmental Assessment (NSMDA)</td>
<td>Functional classification of normal, minimal, mild, moderate, severe, or profound motor dysfunction</td>
</tr>
<tr>
<td>Stanford-Binet Intelligence Scale- 5th edition</td>
<td>Full scale intelligence quotient (FSIQ)</td>
</tr>
<tr>
<td>Clinical assessment</td>
<td>Clinical indication of developmental delay</td>
</tr>
</tbody>
</table>

Related metadata:
Supersedes previous ‘Score of other developmental tests’ – version 1 01/01/2011

Administrative attributes

Source organisation: ANZNN Advisory Council; complies with NSW Neonatal Intensive Care Units Data Collection.

ANZNN label — ‘OthScore’
Level of development (months)

Admin status: CURRENT 01/01/2009

Identifying and definitional attributes

Knowledgebase ID: Version number: 1

Metadata type: DATA ELEMENT

Definition: Level of development in months determined by other developmental tests administered.

Context: High-risk babies admitted for intensive care aged between two to three years.

Relational and representational attributes

Data type: Numeric Field size: Min. 1 Max. 4 Layout: NNNN

Data domain: Number representing level of development in months from the other developmental tests administered

Related metadata: Use in conjunction with other subscales.

Administrative attributes

Source organisation: ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection.

ANZNN label — ‘OthlevDevlp’
Other disabilities

Admin status: CURRENT 01/01/2013

Identifying and definitional attributes

Knowledgebase ID: Version number: 2

Metadata type: DATA ELEMENT

Definition: Other disabilities.

Context: High-risk babies admitted for intensive care aged between two to three years.

Relational and representational attributes

Data type: Numeric Field size: Min. 1 Max. 2 Layout: NN

Data domain:

0 No other disabilities
-1 Yes, other disabilities
99 Unknown

Related metadata:
Supersedes previous ‘Other major disability’ – version 1 01/01/2011

Administrative attributes

Source organisation: ANZNN Advisory Council; complies with NSW Neonatal Intensive Care Units Data Collection.

ANZNN label — ‘OtherDis’
Description of other disabilities

Admin status: CURRENT 01/01/2013

Identifying and definitional attributes

Knowledgebase ID: Version number: 2

Metadata type: DATA ELEMENT

Definition: Description of other disabilities. Include ICD-10 code if known.

Context: High-risk babies admitted for intensive care aged between two to three years.

Relational and representational attributes

Data type: Character  Field size: Min. 5 Max. 250  Layout: CCCCCC

Data domain: Free field representing description of other disabilities and ICD-10 codes if known.

Related metadata: Supersedes previous ‘ICD-10 Code of other major disabilities’ – version 1 01/01/2011

Administrative attributes

Source organisation: ANZNN Advisory Council; complies with NSW Neonatal Intensive Care Units Data Collection.

ANZNN label — ‘OtherDisDesc’
Appendix

Discontinued items
**Registration hospital (discontinued)**

**Admin status:** 01/01/2009 – 31/12/2010

**Identifying and definitional attributes**

**Knowledgebase ID:**

**Version number:** 1

**Data element type:** DATA ELEMENT

**Definition:** The hospital of registration for a baby is the first level III neonatal intensive care unit that the baby remained in for four or more hours during the first 28 days of life.

**Context:** High-risk babies admitted for intensive care.

**Relational and representational attributes**

**Data type:** Character

**Field size:** Min. 08 Max.08

**Layout:** CCCCCCCC

**Data Domain:** Characters representing the registration hospital code.

**Guide for use:** Babies who received their entire care in a level II hospital or who were not transferred to a level III neonatal intensive care unit during the first 28 days were registered to the first level II centre that they remained in for 4 or more hours. If a baby is transferred, she/he is considered to be in the next hospital from the time that the specialist retrieval team (NETS) arrives to collect her/him. If a baby is transferred from one level III hospital to another level III hospital and NETS arrives at or before 4 hours, then the baby belongs to the second level III hospital. Both hospitals should not provide data to the ANZNN. If there is any uncertainty, audit officers should contact the other hospital to clarify the situation.

If the baby dies within four hours, she/he is registered to unit where she/he dies.

**Related metadata:**
Supersedes previous registration hospital given in ‘definitions 01/01/1994’

**Administrative attributes**

**Source organisation:** ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection

**Comments:** This information is coded. Release of information governed by Confidentiality Guidelines.

**ANZNN label — ‘Hospital’**
Infant Birth weight - neonate (discontinued)

**Admin status:** 01/01/2009 – 31/12/2010

**Identifying and definitional attributes**

**Knowledgebase ID:** 000010

**Version number:** 1

**Metadata type:** DATA ELEMENT

**Definition:** The first weight of the live born or stillborn baby obtained after birth

**Context:** Birth weight is an important indicator of pregnancy outcome and is a major risk factor for neonatal morbidity and mortality and is required to analyse perinatal services for high-risk infants.

**Relational and representational attributes**

**Data type:** Numeric

**Field size:** Min. 3 Max. 4

**Layout:** NNNN

**Data domain:** 3 - 4 digit field representing the weight in grams

**Guide for use:**
For live births, birth weight should preferably be measured within the first hour of life before significant postnatal weight loss has occurred. While statistical tabulations include 500g groupings for birth weight, weights should not be recorded in those groupings. The actual weight should be recorded to the degree of accuracy to which it is measured.

**Verification rules:** For provision of State and Territory hospital data to Commonwealth agencies this field must be consistent with diagnoses and procedure codes for valid grouping.

**Administrative attributes**

**Source organisation:** ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection

ANZNN label — ‘Wght’
**Gestational age (discontinued)**

*Admin status:* 01/01/2009 – 31/12/2010

**Identifying and definitional attributes**

- **Knowledgebase ID:** 000060
- **Version number:** 1

**Metadata type:** DATA ELEMENT

**Definition:** The estimated gestation of the baby in completed weeks as determined by clinical validation / acceptance of the estimated date of confinement (EDC) or the allocation of an alternative gestational age at birth based on clinical assessment of the baby.

**Context:** Gestational age at birth is a key determinant of survival and morbidity.

**Relational and representational attributes**

- **Data type:** Numeric
- **Field size:** Min. 2 Max. 2
- **Layout:** NN

**Data domain:** Number representing the number of completed weeks, or 99 for not stated / unknown.

**Guide for use:** Generally the EDC is accepted as defining gestational age at birth. However if mothers dates are uncertain and the EDC has not been determined by ultrasound prior to 20 weeks, or if clinical assessment suggests that the infant’s gestation is 2 or more weeks different from that defined by the EDC, gestational age should be determined by clinical examination of the baby. Ideally this should be via a structured assessment such as the Dubowitz or Ballard tools designed for this purpose.

**Administrative attributes**

- **Source document:** International Classification of Diseases and Related Health Problems, 10th Revision, WHO, 1992.

- **Source organisation:** ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection

**ANZNN label — ‘Gest’**
Estimated Date of Confinement (discontinued)

**Admin status:** 01/01/2009 – 31/12/2010

Identifying and definitional attributes

Knowledgebase ID: Version number:

**Metadata type:** DATA ELEMENT

**Definition:** The estimated calendar date of when the baby will be born in completed weeks as determined by documentation of the date of the last menstrual period and early antenatal ultrasound.

**Context:** The gestation at birth is a key outcome of pregnancy and an important risk factor for neonatal survival and morbidity.

Relational and representational attributes

**Data type:** Numeric **Field size:** Min. 10 Max. 10 **Layout:** DD/MM/YYYY

**Data domain:** Valid dates

**Guide for use:**
The EDC is generally defined by the date of the last menstrual period. If the date of the last menstrual period is not known, early ultrasound prior to 10 weeks is accurate +/- 3 days. It is at least as accurate as the date of the LMP. If this is available the obstetrician will generally use this information in preference to the LMP in defining the EDC. If dates are uncertain an ultrasound performed prior to 20 weeks has an accuracy of +/- 2 weeks. This in combination with clinical assessment of fetal size generally allows an obstetrician to define with reasonable accuracy an EDC. However this is generally less accurate than clinical assessment of the baby after birth. In this situation the gestational age of the infant is best reviewed and defined by structured clinical assessment of the baby.

Administrative attributes

**Source document:** International Classification of Diseases and Related Health Problems, 10th Revision, WHO, 1992.

**Source Organisation:** ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection

ANZNN label — ‘EDC’
Corrected age in days (discontinued)

**Admin status:** 01/01/2009 – 31/12/2010

**Identifying and definitional attributes**

**Knowledgebase ID:**

**Version number:**

**Metadata type:** DATA ELEMENT

**Definition:** Age in days corrected for prematurity based on the age the child would be if the pregnancy had gone to term (40 weeks)

**Context:** Assessment of growth and development should be based on age which has been corrected for prematurity. Some developmental assessment tools require the age when the assessment was performed in days.

**Relational and representational attributes**

**Data type:** Numeric  
**Field size:** Min. 2 Max. 2  
**Layout:** NN

**Data domain:** Number representing the number of completed days, or 99 for not stated / unknown.

**Administrative attributes**


**Source organisation:** ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection

ANZNN label — ‘CorrAgeDay’
Birth plurality (discontinued)

Admin status: 01/01/2009 – 31/12/2010

Identifying and definitional attributes

Knowledgebase ID: Version number:

Metadata type: DATA ELEMENT

Definition: The total number of births resulting from this pregnancy.

Context: Multiple pregnancy increases the risk of complications during pregnancy, labour and birth and is associated with higher risk of perinatal morbidity and mortality.

Relational and representational attributes

Data type: Numeric Field size: Min. 1 Max. 2 Layout: NN

Data domain:

0 Singleton – only one baby born
1 Twins – Two babies
2 Triplets – Three babies
3 Quads – Four babies
4 Quintuplets – Five babies
5 Sextuplets – Six babies
6 Other
99 Not stated

Guide for use: Plurality of a pregnancy is determined by the number of live births or by the number of fetuses that remain in utero at 20 weeks’ gestation and that are subsequently born separately. In multiple pregnancies or, if gestational age is unknown, only live births of any birth weight or gestational age, or fetuses weighing 400 g or more are taken into account in determining plurality. Fetuses aborted before 20 completed weeks or fetuses compressed in the placenta at 20 or more weeks are excluded.

Related metadata: Is qualified by Birth order, version 1

Administrative attributes

Source organisation: ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection

ANZNN label — ‘Plurality’
Birth order (discontinued)

Admin status: 01/01/2009 – 31/12/2010

Identifying and definitional attributes

Knowledgebase ID: 000019   Version number: 1

Date element type: DATA ELEMENT

Definition: The order of each baby of a multiple birth.

Context: Perinatal: required to analyse pregnancy outcome according to birth order and identify the individual baby resulting from a multiple birth pregnancy. Multiple births have higher risks of perinatal mortality and morbidity. Multiple birth pregnancies are often associated with obstetric complications, labour and delivery complications, higher rates of neonatal morbidity, low birth weight and a higher perinatal mortality.

Relational and representational attributes

Data type: Numeric   Field size: Min. 1 Max. 2   Layout: NN

Data domain: A 1-2 digit numeric field representing the birth order.

0  Singleton
1  First of a multiple birth
2  Second of a multiple birth
3  Third of a multiple birth
4  Fourth of a multiple birth
5  Fifth of a multiple birth
6  Sixth of a multiple birth
7  Other
99  Not stated

Related metadata: Is qualified by Birth plurality, version 1

Administrative attributes

Source organisation: National Perinatal Data Development Committee.
National minimum data set: Perinatal

Source organisation: ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection

ANZNN label — ‘BrthOrd’
English is the first language at home (discontinued)

Admin status: 01/01/2009 – 31/12/2010

Identifying and definitional attributes

Knowledgebase ID: Version number:

Metadata type: DATA ELEMENT

Definition: The language reported by the parent or carer as the main language other than English spoken in his/her home (or most recent private residential setting occupied by the person) to communicate with other residents of the home or setting and regular visitors, as represented by a code.

Context: High-risk babies admitted for intensive care and aged between two or three years.

Relational and representational attributes

Data type: Numeric Field size: Min. 1 Max. 2 Layout: NN

Data domain:

0  No, English is not the first language spoken at home
-1  Yes, English is the first language at home
99  Unknown

Administrative attributes


Source organisation: ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection.

ANZNN label — ‘EngIstLang’
**Height (measured) (discontinued)**

**Admin status:** 01/01/2009 – 31/12/2010

**Identifying and definitional attributes**

**Knowledgebase ID:** 270361

**Metadata type:** DATA ELEMENT

**Definition:** The height of a child aged 3 years or older measured in centimetres.

**Context:** Public Health and healthcare

**Relational and representational attributes**

**Data type:** Numeric

**Field size:** Min. 3 Max. 4

**Layout:** NN (N).N

**Data domain:** 3-4 digit numbered field representing the height in centimetres

**Guide for use:** Measurements of height should be assessed in relation to children and adolescents’ age and pubertal status.

**Measurement protocol:** The measurement of height requires a vertical metric rule, a horizontal headboard, and a non-compressible flat even surface on which the subject stands. The equipment may be fixed or portable, and should be described and reported. The graduations on the metric rule should be at 0.1 cm intervals, and the metric rule should have the capacity to measure up to at least 210 cm. Measurement intervals and labels should be clearly readable under all conditions of use of the instrument

**Related metadata:**
Superseded by 'Type of stature measurement' – version 1 01/01/2011
Supersedes ‘Stature’ – version 1 01/01/2011

**Administrative attributes**

**Source document:** AIHW National Health Data Dictionary (NHDD) Version 14

**Source organisation:** ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection

**ANZNN label** — ‘Hght’
Length (discontinued)

**Admin status:** 01/01/2009 – 31/12/2010

**Identifying and definitional attributes**

**Knowledgebase ID:**

**Version number:** 1

**Metadata type:** DATA ELEMENT

**Definition:** The length of a child aged up to and including 2 years of age measured in centimetres.

**Context:** Public health and health care

**Relational and representational attributes**

**Data type:** Numeric  
**Field size:** Min. 3 Max. 4  
**Layout:** NN (N),N

**Data domain:** 3 - 4 digit numbered field representing length in centimetres

**Guide for use:** Measurements of height should be assessed in relation to children and adolescents' age and pubertal status.

**Measurement protocol:** For the measurement of supine length of children up to and including 2 years of age, two observers are required. One observer positions the head correctly while the other ensures the remaining position is correct and brings the measuring board in contact with the feet. The subject lies in a supine position on a recumbent length table or measuring board. The crown of the head must touch the stationary, vertical headboard. The subject's head is held with the line of vision aligned perpendicular to the plane of the measuring surface. The shoulders and buttocks must be flat against the table top, with the shoulders and hips aligned at right angles to the long axis of the body. The legs must be extended at the hips and knees and lie flat against the table top and the arms rest against the sides of the trunk. The measurer must ensure that the legs remain flat on the table and must shift the movable board against the heels. In infants care has to be taken to extend the legs gently. In some older children two observers may also be required.

**Related metadata:**

Superseded by ‘Type of stature measurement’ – version 1 01/01/2011
Supersedes ‘Stature’ – version 1 01/01/2011

**Administrative attributes**

**Source document:** AIHW National Health Data Dictionary (NHDD) Version 14  

**Source organisation:** ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection.

**ANZNN label — ‘Length’**
Date of most recent hearing test (discontinued)

Admin status: 01/01/2009 – 31/12/2010

Identifying and definitional attributes

Knowledgebase ID: Version number:

Metadata type: DATA ELEMENT

Definition: The date of the most recent hearing test performed by an audiologist. Exclude the newborn hearing screening test.

Context: It is recommended by the American Academy of Pediatrics, that high-risk neonates admitted for intensive care should have their hearing formally assessed sometime between their 1st and 3rd birthday. Recoding the date enables computation of the corrected age when this was performed.

Relational and representational attributes

Data type: Numeric Field size: Min. 10 Max. 10 Layout: DD/MM/YYYY

Data domain: Valid dates

Guide for Use
The date of the assessment will often be provided by parents. Sometimes this will be an estimate. The best guess is acceptable. If the month is the best guess, the 15th of the month may be used.

Administrative attributes

Source organisation: ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection.

ANZNN label — ‘Hearage’
Hearing tested (discontinued)

Admin status: 01/01/2009 – 31/12/2010

Identifying and definitional attributes

Knowledgebase ID: Version number:

Metadata type: DATA ELEMENT

Definition: Result from the most recent hearing assessment (irrespective of type of test) by an audiologist. This may be provided verbally by the parent or carer at the two to three year age follow-up assessment. However a written report is preferable.

Context: High-risk babies admitted for intensive care aged two to three years.

Relational and representational attributes

Data type: Numeric

Field size: Min. 1 Max. 2

Layout: NN

Data domain:

0  Not tested
1  Normal hearing result (no hearing aid)
2  Normal hearing result with hearing aid
3  Abnormal hearing result (no hearing aid)
4  Abnormal hearing result with hearing aid
99  Result unknown

Guide for use: If hearing is impaired then the level of impairment, as defined by the audiologist, should be recorded for each ear. Ideally, this should be provided in accordance with the definitions determined by Australian Hearing and provided by specialist audiologists. However it is acknowledged that this level of detail may not be available.

Administrative attributes

Source organisation: ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection.

ANZNN label — ‘Heartest’
Ophthalmic Assessment (discontinued)

Admin status: 01/01/2009 – 31/12/2010

Identifying and definitional attributes

Knowledgebase ID:  
Version number: 

Metadata type: DATA ELEMENT

Definition: Specialist paediatric ophthalmologist assessment performed since initial discharge home. This information may be provided by the parent or carer at the two to three year follow-up assessment.

Context: Infants < 1000g birth weight or < 28 weeks gestation are at significant risk of retinopathy of prematurity which has, in some cases, substantial long term retinal morbidity plus a risk of amblyopia and strabismus.

Relational and representational attributes

Data type: Numeric   Field size: Min. 1 Max. 2   Layout: NN

Data domain:

0  Normal Ophthalmologist assessment  
1  Abnormal Ophthalmologist assessment  
2  Eyes not examined  
99  Unknown

Administrative attributes

Source organisation: ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection.

ANZNN label — ‘Vision’
Speech Disorder (discontinued)

Admin status: 01/01/2009 – 31/12/2010

Identifying and definitional attributes

Knowledgebase ID:  Version number:

Metadata type: DATA ELEMENT

Definition: Speech disordered and poorly understandable / gabble. This may be reported by parent or carer at the two to three year follow-up assessment, or be the outcome of an assessment by a speech pathologist, psychologist or paediatrician.

Context: High-risk babies admitted for intensive care aged two to three years.

Relational and representational attributes

Data type: Numeric  Field size: Min. 1 Max. 2  Layout: NN

Data domain:

0 Normal speech at 2-3 years
1 Mostly intelligible speech but not normal
2 Some intelligible speech but not normal
3 Little or no intelligible speech
99 Unknown

Administrative attributes

Source organisation: ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection.

ANZNN label — ‘SpchDis’
**Language Use / Speech Delay (discontinued)**

**Admin status:** 01/01/2009 – 31/12/2010

Identifying and definitional attributes

**Knowledgebase ID:**

**Version number:**

**Metadata type:** DATA ELEMENT

**Definition:** Assessment undertaken as part of a medical assessment at 2 or 3 years of age.

**Context:** High-risk babies admitted for intensive care aged two to three years.

Relational and representational attributes

**Data type:** Numeric  

**Field size:** Min. 1 Max. 2  

**Layout:** NN

**Data domain:**

- **0** Uses phrases and sentences normally for age 2-3 years
- **1** Limited use of phrases and sentences for age (delayed language development)
- **2** Uses single or two word phrases or signs (moderate to severe delay)
- **3** No meaningful words or phrases (profound delay)
- **99** Unknown

Administrative attributes

**Source organisation:** ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection.

**ANZNN label — ‘SpchDel’**
Respiratory status at follow-up (discontinued)

Admin status: 01/01/2009 – 31/12/2010

Identifying and definitional attributes

Knowledgebase ID: Version number:

Metadata type: DATA ELEMENT

Definition: Respiratory disease present at the time of the two to three year follow-up assessment provided by the parents/carer.

Context: High-risk babies admitted for intensive care aged two to three years.

Relational and representational attributes

Data type: Numeric Field size: Min. 1 Max. 2 Layout: NN

Data domain:

0 Normal - no problems
1 Recurrent wheeze ± medications
2 Chronic wheeze ± medications
99 Unknown

Administrative attributes

Source organisation: ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection.

ANZNN label — ‘Respfup’
Evidence of Airway Injury at time of follow-up assessment (discontinued)

Admin status: 01/01/2009 – 31/12/2010

Identifying and definitional attributes

Knowledgebase ID: Version number:

Metadata type: DATA ELEMENT

Definition: Airway injury present at the time of the two to three year follow-up assessment provided by the parents/carer.

Context: High-risk babies admitted for intensive care aged two to three years.

Relational and representational attributes

Data type: Numeric Field size: Min. 1 Max. 2 Layout: NN

Data domain:

- 0 No airway injury present
- 1 Abnormal voice – raspy, soft voice, cannot shout
- 2 Tracheal stenosis or stridor
- 3 Nasal-septal injury
- 99 Unknown

Guide for use: Can have more than one injury.

Administrative attributes

Source organisation: ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection.

ANZNN label — ‘Respfup1’
Gastrointestinal status at time of follow-up assessment (discontinued)

Admin status: 01/01/2009 – 31/12/2010

Identifying and definitional attributes

Knowledgebase ID: 

Version number:

Metadata type: DATA ELEMENT

Definition: Gastrointestinal disease present at the time of the two to three year follow-up assessment reported by the parents/carer.

Context: High-risk babies admitted for intensive care aged two to three years.

Relational and representational attributes

Data type: Numeric Field size: Min. 1 Max. 2 Layout: NN

Data domain:

0 Normal gastrointestinal status – no problems with feeding
1 Abnormal gastrointestinal status – long term problems since discharge from hospital
99 Unknown

Administrative attributes

Source organisation: ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection.

ANZNN label — ‘GIT’
Renal function (discontinued)

Admin status: 01/01/2009 – 31/12/2010

Identifying and definitional attributes

Knowledgebase ID: Version number:

Metadata type: DATA ELEMENT

Definition: Renal disease present at the time of the two to three year follow-up assessment provided by the parents/carer.

Context: High-risk babies admitted for intensive care aged two to three years.

Relational and representational attributes

Data type: Numeric Field size: Min. 1 Max. 2 Layout: NN

Data domain:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Normal renal function</td>
</tr>
<tr>
<td>1</td>
<td>Abnormal renal function</td>
</tr>
<tr>
<td>99</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

Administrative attributes

Source organisation: ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection.

ANZNN label — ‘Renal’
Renal Disease (discontinued)

*Admin status*: 01/01/2009 – 31/12/2010

**Identifying and definitional attributes**

**Knowledgebase ID**: 

**Version number**: 

**Metadata type**: DATA ELEMENT

**Definition**: At the time of the age two to three year follow-up assessment, the therapy the child is receiving for renal disease, as represented by a code.

**Context**: High-risk babies admitted for intensive care aged two to three years.

**Relational and representational attributes**

**Data type**: Numeric  

**Field size**: Min. 1 Max. 2  

**Layout**: NN

**Data domain**:

<table>
<thead>
<tr>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No renal disease</td>
</tr>
<tr>
<td>1</td>
<td>Dialysis</td>
</tr>
<tr>
<td>2</td>
<td>Awaiting a transplant</td>
</tr>
<tr>
<td>3</td>
<td>Completed Transplant</td>
</tr>
<tr>
<td>99</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

**Administrative attributes**

**Source organisation**: ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection.

ANZNN label — ‘RenalDis’
Motor Assessment (discontinued)

Admin status: 01/01/2009 – 31/12/2010

Identifying and definitional attributes

Knowledgebase ID:                Version number:

Metadata type: DATA ELEMENT

Definition: Abnormal motor assessment as assessed by the paediatrician at the two or three year follow-up assessment.

Context: High-risk babies admitted for intensive care aged two to three years.

Relational and representational attributes

Data type: Numeric

Field size: Min. 1 Max. 2

Layout: NN

Data domain:

0 Normal motor assessment
1 Abnormal motor assessment
99 Unknown

Administrative attributes

Source organisation: ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection.

ANZNN label — ‘Motor’
Motor Assessment - walking at 2 or 3 years corrected age (discontinued)

Admin status: 01/01/2009 – 31/12/2010

Identifying and definitional attributes

Knowledgebase ID: Version number: 

Metadata type: DATA ELEMENT

Definition: The severity of Cerebral Palsy. Mild walking at 2 years; Moderate not walking at 2 years but will walk eventually; Severe permanently non-ambulant

Context: High-risk babies admitted for intensive care aged two to three years. This is a useful adjunct to the Gross Motor Classification System for Cerebral Palsy, which may not always be available.

Relational and representational attributes

Data type: Numeric Field size: Min. 1 Max. 2 Layout: NN

Data domain:

0 Normal / minimal delay - walking by 15 months
1 Mild delay - walking independently by 2 years
2 Moderate delay – presumed will walk by 4 years
3 Severe delay – unlikely to ever walk
99 Unknown

Administrative attributes

Source organisation: ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection.

ANZNN label — ‘Motorwalk’
Type of Cerebral Palsy (discontinued)

Admin status: 01/01/2009 – 31/12/2010

Identifying and definitional attributes

Knowledgebase ID: Version number: 2

Metadata type: DATA ELEMENT

Definition: The type of cerebral palsy specified by examination, as represented by a code.

Context: High-risk babies admitted for intensive care aged two to three years.

Relational and representational attributes

Data type: Numeric  Field size: Min. 1 Max. 2  Layout: NN

Data domain:

1  Spastic monoplegia
2  Spastic hemiplegia
3  Spastic diplegia
4  Spastic triplegia
5  Spastic quadriplegia
6  Ataxic
7  Dyskinetic CP, mainly athetoid
8  Dyskinetic CP, mainly dystonic
9  Hypotonic CP
10  Dystonia (2-3 yrs only)
11  Mixed ataxia (2-3 yrs only)
99  Unknown

Administrative attributes

Source organisation: ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection and the Australian Cerebral Palsy Register

ANZNN label — ‘TypeCP’
Bayley Scales of Infant and Toddler Development - third edition (discontinued)

Admin status: 01/01/2009 – 31/12/2010

Identifying and definitional attributes

Knowledgeable ID: Version number: 1


Context: High risk babies that have been admitted for intensive care and aged between two and three years

Relational and representational attributes

Data type: Numeric Field size: Min. 1 Max.3 Layout: NNN

Data domain:

0 No Bayley-III assessment performed
-1 Yes, Bayley-III assessment performed
99 Unknown

ANZNN label ─ BayleyDevTest

Bayley scales of infant and toddler development III subtests

Cognitive Scale: Assesses the sensory motor development, exploration and manipulation, object relatedness concept formation, memory and other aspects of cognitive processing.

- Scaled Score*
- Composite Score*
- Percentile Rank*

ANZNN label ─ CognScale
ANZNN label ─ CognComp
ANZNN label ─ CognPercent
Language Scale

*Receptive communication:* Includes items that assess preverbal behaviours, vocabulary development, such as being able to identify objects and pictures that are referenced; vocabulary related to morphological development, such as pronouns and prepositions; and understanding of morphological markers, such as plural –s, tense markings (-ing, -ed) and the possessive –‘s.

- Scaled Score*

*ANZNN label — ResScale*

*Expressive communication:* includes items that assess preverbal communication, such as babbling, gesturing, joint referencing, and turn taking, vocabulary development such as naming objects, pictures and attributes (e.g. colour and size); and morpho-syntactic development, such as using two-word utterances, plurals and verb tense.

- Scaled Score*

*ANZNN Label — ExpScale*

*SUM:* Is the sum of the receptive communication score and the expressive communication score. This sum is then used to calculate the composite score and percentile rank for the language scale.

- Scaled Score*
- Composite Score*
- Percentile Rank*

*ANZNN label — LangSumScale*

*ANZNN label — langSumComp*

*ANZNN label — langSumPercent*
Motor Scale

**Fine Motor:** Fine motor skills are associated with prehension, perceptual-motor integration, motor planning, and motor speed are included in the fine motor subtest. Items measure young children's skills related to visual tracking, reaching, object manipulation and grasping. Children's functional hand skills and responses to tactile information are also measured.
- Scaled Score*

**ANZNN label — FinMotScale**

**Gross Motor:** primarily measures the movement of the limbs and torso. Items assess static positioning (e.g., sitting, standing); dynamic movement, including locomotion and coordination; balance; and motor planning
- Scale Score*

**ANZNN label — GrossMotScale**

**SUM:** Is the sum of the fine motor score and the gross motor score. This sum is then used to calculate the composite score and percentile rank for the motor scale.
- Scaled Score*
- Composite Score*
- Percentile Rank*

**ANZNN label — MotSumScale**
**ANZNN label — MotSumComp**
**ANZNN label — MotSumPercent**
*Scaled scores*- are derived from the subtest total raw scores and range from 1-19, with a mean of 10 and a standard deviation of 3.

*Composite scores*- are derived from a various sums of subtest scaled scores. Composite scores are generated for language scale, motor scale and adaptive behaviour. These scores are scaled to a metric with a mean of 100 and a SD of 15 ranges from 40-160.

*Percentile rank*- indicated the standing of a child relative to that of children in the standardization sample. Percentile ranks range from 1-90, with 50 as the mean and median

**Related metadata:**
Superseded by ‘Bayley Scales of infant and toddler development -3rd edition’ version 2 01/01/2011

**Administrative attributes**

**Source document**: Bayley N 2006, Bayley scales of infant and toddler development Third Edition PsychCorp.

**Source Organisation**: ANZNN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection.
Griffiths Mental Development Scales - extended revised (GMDS-ER) (discontinued)

Admin status: 01/01/2009 – 31/12/2010

Identifying and definitional attributes

Knowledgeable ID: Version number: 1

Definition: The GMDS-ER assesses the mental development of young children. The GMDS-ER consists of five subscales: Locomotor, Personal-Social, Hearing and Speech, Eye and hand coordination, performance and practical reasoning.

Context: High risk babies that have been admitted for intensive care and aged between 2 or 3 years

Relational and representational attributes

Data type: Numeric Field size: min. 1 Max. 3 Layout: NNN

Data domain:

1 No GMDS-ER assessment performed
-1 Yes, GMDS-ER assessment performed
99 Unknown

ANZNN label ─ GMDS_ER

GMDS-ER Subscales A-F

Locomotor Subscale (Subscale A): Examines the child’s gross motor skills including the child’s ability to balance, and to co-ordinate and control movements. Test items include age appropriate activities such as walking up and down stairs, kicking a ball, riding a bike, jumping and skipping.

- Raw Score*
- Standard Score*
- Age Equivalent*
- Percentile*

ANZNN label ─ LocRawScore
ANZNN label ─ LocStandScore
ANZNN label ─ LocAgeEquiv
ANZNN label ─ LocPercent
**Personal/ Social Subscale (Subscale B):** Examines the child’s proficiency in the activities of daily living, level of independence and ability to interact with other children. Test items include age appropriate activities such as dressing and undressing, competency using cutlery and knowledge of information such as date of birth or address.

- Raw Score*
- Standard Score*
- Age Equivalent*
- Percentile*

ANZNN Label ─ PersocRawScore
ANZNN Label ─ PersocStandScore
ANZNN Label ─ PersocAgeEquiv
ANZNN Label ─ PersocPercent

**Language Subscale (Subscale C):** examines the child’s receptive and expressive language. The test items include age appropriate items such as naming objects and colours, repeating sentences, describing a picture and answering a series of questions about comprehension/similarities/differences.

- Raw Score*
- Standard Score*
- Age Equivalent*
- Percentile*

ANZNN Label ─ HearSpeRawScore
ANZNN Label ─ HearSpeStandScore
ANZNN Label ─ HearSpeAgeEquiv
ANZNN Label ─ HearSpePercent

**Eye and hand co-ordination Subscale (Subscale D):** Examines the child’s fine motor skills, manual dexterity and visual perception skills. The test items include age appropriate items such as threading beads, cutting with scissors, copying shapes and writing letters and numbers.

- Raw Score*
- Standard Score*
- Age Equivalent*
- Percentile*

ANZNN Label ─ EyeHandRawScore
ANZNN Label ─ EyeHandStandScore
ANZNN Label ─ EyeHandAgeEquiv
ANZNN Label ─ EyeHandPercent
**Performance Subscale (Subscale E):** Examines the child’s manipulation skills including their speed of working and precision. The test items include age appropriate activities such as building bridges or stairs, completion of foam boards and pattern making
- Raw Score*
- Standard Score*
- Age Equivalent*
- Percentile*

ANZNN Label ─ PerfRawScore
ANZNN Label ─ PerfStandScore
ANZNN Label ─ PerfAgeEquiv
ANZNN Label ─ PerfPercent

**Practical Reasoning Subscale (Subscale F):** Examines the child’s ability to solve practical problems and understand basic mathematical concepts and questions about moral and sequential issues. The test items include age appropriate activities such as counting and comparison of size, length and height. This subscale also assesses the child’s knowledge of the days of the week, ability to tell the time and understanding of right and wrong
- Raw Score*
- Standard Score*
- Age Equivalent*
- Percentile*

ANZNN Label ─ PracReasRawScore
ANZNN Label ─ PracReasStandScore
ANZNN Label ─ PracReasAgeEquiv
ANZNN Label ─ PracReasPercent

**GENERAL QUOTIENT (GQ):** Shows how the child’s total score varies around the total mean, with a mean of 100 and a standard deviation of 15.
- Raw Score*
- Standard Score*
- Age Equivalent*
- Percentile*

ANZNN Label ─ GQRawScore
ANZNN Label ─ GQStandScore
ANZNN Label ─ GQAgeEquiv
ANZNN Label ─ GQPercent
**Raw Score**: each test item is scored as a pass or fail using the criteria in the GMDS-ER administration manual. To obtain the raw score for calculating the GQ is achieved by taking the average of the raw scores for the six subscales.

**Standard Score**: are used to interpret the child’s performance on individual subscales according to the qualitative descriptive categories provided in the GMDS-ER technical manual. Consistently low performance on all subscales is indicative of a gender developmental delay or significant learning difficulties.

**Age Equivalent**: is the score most closely corresponding to that of the child in the 50th percentile column of the tables in Appendix D (GMSA-ER analysis manual). This represents the child’s age equivalent or mental age; this is sometimes described as the ‘mental age’.

**Percentiles**: Normative tables for converting the raw scores from each subscale into percentiles and z scores are provided in Appendix D (GMSA-ER analysis manual).

**Related metadata**: Superseded by ‘Griffiths Mental Developmental Scales – extended revision (GMDS-ER)’ version 2 01/01/2011

**Administrative attributes**


**Source Organisation**: ANZN Advisory Committee; complies with NSW Neonatal Intensive Care Units Data Collection.