
Data quality information — Children’s services, chapter 3

Data quality information

Data quality information (DQI) has been prepared for the first time for the 2011 Report on Government Services. DQI provides information against the seven ABS data quality framework dimensions, for a selection of performance indicators in the Children’s services chapter. DQI for additional indicators will be progressively introduced in future reports.

Technical DQI has been supplied or agreed by relevant data providers. Additional Steering Committee commentary does not necessarily reflect the views of data providers.

DQI are available for the following performance indicators:

| | |
|---|---|
| Non-standard hours of care in child care services | 2 |
| Family work related needs | 4 |
| Demand for formal care | 7 |

Non-standard hours of care in child care services

Data quality information for this indicator has been drafted by the Australian Government Department of Education, Employment and Workplace Relations, with additional Steering Committee comments.

Indicator definition and description

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|------------------------------|--|
| Element | Effectiveness — Access |
| Indicator | Non-standard hours of care in child care services |
| Measure (computation) | <p><u>Definition</u></p> <p>The proportion of approved child care services providing non-standard hours of care.</p> <p><u>Numerator</u></p> <p>Number of approved child care service providers providing non-standard hours of care by service model (centre-based long day care, vacation care, occasional care, family day care and outside school hours care).</p> <p><u>Denominator</u></p> <p>Total number of approved child care providers by service model (centre-based long day care, vacation care, occasional care, family day care and outside school hours care).</p> <p><u>Computation</u></p> <p>The number of approved child care service providers providing non-standard hours of care divided by the total number of approved service providers. Calculated separately for each service model (centre-based long day care, vacation care, occasional care, family day care and outside school hours care).</p> |
| Data source/s | <p><u>Numerator/s:</u></p> <p>Child care management system (DEEWR unpublished)</p> <p><u>Denominator/s:</u></p> <p>Child care management system (DEEWR unpublished)</p> |

Data Quality Framework Dimensions

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| Institutional environment | <p>CCMS data are collected by FaHCSIA under the Family Assistance (Administration) Act.</p> <p>The data are compiled by DEEWR.</p> |
| Relevance | Approved child care service data, collected at a service level and geocoded and boundary tagged, so all geographies are available. |
| Timeliness | Data are collected weekly, available since services transitioned to CCMS between 2008 and June 2009. Data are reported on a quarterly basis. |
| Accuracy | Data are collected via an electronic administrative system. All approved services are represented. |
| Coherence | Since the introduction of CCMS, the data have been consistent. The definition remains unchanged. |
| Accessibility | Data at the service level is protected under the Family Assistance (Administration) Act. To date data have only been released for Report on Government Services. |
| Interpretability | Limited supporting documentation is available. |

Data Gaps/Issues Analysis

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| Key data gaps/issues | <p>The Steering Committee notes the following key data gaps/issues:</p> <ul style="list-style-type: none">• This indicator does not provide information on the demand for non-standard hours of care. |
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- This indicator does not provide information on how non-standard hours services meet the needs of users.

Family work related needs

Data quality information for this indicator has been drafted by the Secretariat in consultation with the ABS, with additional Steering Committee comments.

Indicator definition and description

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|------------------------------|--|
| Element | Outcome |
| Indicator | Family work-related needs |
| Measure (computation) | <p><u>Definition:</u> The proportion of children aged 0-12 years in families participating in the labour force for whom formal care, or additional hours of formal care, was required for work-related reasons but was unable to be accessed.</p> <p><u>Numerator:</u> Number of children aged 0-12 years in families participating in the labour force who required any/additional formal care for mainly work-related reasons but were unable to access this care. Where 'any/additional formal care' is formal care or additional formal care required on a regular basis.</p> <p><u>Denominator:</u> All children aged 0-12 in families participating in the labour force.</p> <p><u>Computation:</u> The number of children aged 0-12 years in families participating in the labour force who required any/additional formal care for mainly work-related reasons but were unable to access this care, divided by all children aged 0-12 in families participating in the labour force.</p> |
| Data source/s | <p><u>Numerator:</u> ABS (unpublished) <i>Childhood Education and Care Survey 2008</i>, Cat. no. 4402.0, Canberra</p> <p><u>Denominator:</u> ABS (unpublished) <i>Childhood Education and Care Survey 2008</i>, Cat. no. 4402.0, Canberra</p> |

Data Quality Framework Dimensions

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|----------------------------------|--|
| Institutional environment | <p>Data are collected and compiled by the ABS through the Childhood Education and Care Survey (CEaCS), conducted throughout Australia in June 2008 as a supplement to the Australian Bureau of Statistics (ABS) monthly Labour Force Survey (LFS). Information was obtained through interviews conducted over a two-week period between 9-21 June 2008.</p> <p>For information on the institutional environment of the ABS, including the legislative obligations of the ABS, which cover this collection, please see ABS Institutional Environment.</p> |
| Relevance | <p>The proportion of children aged 0-12 years in families participating in the labour force who required any/additional formal care for mainly work related reasons but were unable to access this care are available by state/territory disaggregation. Data for SA and the NT were not available for publication, but are included in the total for Australia.</p> <p>All data are collected to standard classifications as stated in the CEaCS Explanatory notes</p> |
| Timeliness | <p>The reference period for the 2008 CEaCS data is June 2008 (with reissue 2009) and was published in July 2009. From 1969 to 2005 the ABS conducted 12 Child Care Surveys (CCS) and from 1993 the survey has been run every three years. The ABS plans to conduct this survey again in June 2011.</p> |
| Accuracy | <p>Survey information was obtained through interviews with occupants of 8562</p> |

dwellings across Australia. The survey sample size for each jurisdiction was: NSW: 2110; Vic: 1672; Qld: 1557; SA: 877; WA:1 095; Tas: 579; NT: 322 and the ACT: 350. There was an overall reduction in the survey sample from the June 2005 Child Care Survey to the June 2008 CEaCS of 16 per cent. This reduction is due in part to the usual sample reductions that occur as part of the LFS redesign following each Census - the redesign based on the 2006 Census was implemented over the period November 2007 to June 2008. After redesign the LFS sample size grows each year as the population grows until the next redesign. A reduction of about 5 per cent in the June 2008 CEaCS sample from the June 2005 Child Care Survey sample is due to this redesign, which generally has no impact on the quality of CEaCS estimates.

Since the estimates in this publication are based on information obtained from occupants of a sample of dwellings, they are subject to sampling variability. That is, they may differ from those estimates that would have been produced if all dwellings had been included in the survey.

Data that have relative standard errors above 25 per cent are indicated (by italics), and need to be used with caution. Data with relative standard errors greater than 50 per cent are considered too unreliable for general use and are not published here. The 95 per cent confidence interval (a reliability estimate) associated with each proportion estimate is reported (for example, 80.0 per cent \pm 2.7 per cent). See section AA.5 of the Statistical appendix for more information on confidence intervals and relative standard errors.

The survey was conducted in both urban and rural areas in all states and territories, but excluded persons living in very remote parts of Australia who would otherwise have been within scope of the survey. The exclusion of these persons will have only a minor impact on any aggregate estimates that are produced for individual states and territories, except in the Northern Territory where such persons account for around 23 per cent of the population.

Non-sampling errors are inaccuracies that occur because of imperfections in reporting by respondents and interviewers, and errors made in coding and processing data. These inaccuracies may occur in any enumeration whether it be a full count or a sample. Every effort is made to reduce the non-sampling error to a minimum by careful design of questionnaires, intensive training and supervision of interviewers, and efficient processing procedures

Coherence

In 2005, the Child Care Survey collected data based on additional care required in the previous 4 weeks. In 2008, the CEaCS collected data based on current or future requirements for additional care. Data are not directly comparable, and care should be taken in interpreting these data.

Information about usual child care arrangements and usual preschool attendance is affected by the specific timing of data collection, the age of the child at that time, and state policies on age eligibility for enrolment at school and preschool which affect the likelihood of a child being enrolled at the time of the survey. For information on survey reference week measures, in all states and territories except Tasmania, data were collected on the use of child care and attendance at preschool related to the week prior to the interview (the survey reference week, chosen to avoid school holidays). In Tasmania, where school holidays were earlier than in other jurisdictions, respondents were asked to recall child care usage and preschool attendance related to the period 26 May to 1 June 2008.

The survey excluded people living in very remote parts of Australia which has a significant impact on data from the Northern Territory where this accounts for approximately 23 per cent of the population.

Accessibility

Predominantly national level information are published in the CEaCS (Cat. no. 4220.0) on the ABS website. A range of data cubes, with a focus on state/territory level information, is also available on the ABS website. Additional data can be accessed from the ABS. Costs are associated with additional data

and vary depending on the type of request.

Interpretability CEaCS (Cat. no. 4402.0) includes [Explanatory notes](#) and a [Glossary](#) available on the ABS website.

Data Gaps/Issues Analysis

Key data gaps/ issues The Steering Committee notes the following key data gaps/issues:

- Excludes persons living in very remote parts of Australia who would otherwise have been within scope of the survey. This affects the comparability of the Northern Territory results where such persons account for around 23 per cent of the population.
- Since the estimates in this publication are based on information obtained from occupants of a sample of dwellings, they are subject to sampling variability.

Demand for formal care

Data quality information for this indicator has been drafted by the Secretariat in consultation with the ABS, with additional Steering Committee comments.

Indicator definition and description

| | |
|------------------------------|--|
| Element | Outcome |
| Indicator | Demand for formal care |
| Measure (computation) | <p><u>Definition</u></p> <p>The proportion of children aged 0-12 years for whom formal care or additional formal care services was required but was unable to be accessed. Formal care includes child care and preschool services.</p> <p><u>Numerator:</u></p> <p>All children aged 0-12 years who required but were unable to access any/additional formal care and/or preschool.</p> <p><u>Denominator:</u></p> <p>All children aged 0-12 years.</p> <p><u>Computation:</u></p> <p>The number of children aged 0-12 years who required but were unable to access any/additional formal care and/or preschool divided by all children aged 0-12 years.</p> |
| Data source/s | <p><u>Numerator/s:</u></p> <p>ABS (unpublished) Childhood Education and Care Survey 2008, Cat. no. 4402.0, Canberra</p> <p><u>Denominator/s:</u></p> <p>ABS (unpublished) Childhood Education and Care Survey 2008, Cat. no. 4402.0, Canberra</p> |

Data Quality Framework Dimensions

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| Institutional environment | <p>Data are collected and compiled by the ABS through the Childhood Education and Care Survey (CEaCS), conducted throughout Australia in June 2008 as a supplement to the Australian Bureau of Statistics (ABS) monthly Labour Force Survey (LFS). Information was obtained through interviews conducted over a two-week period between 9-21 June 2008.</p> <p>For information on the institutional environment of the ABS, including the legislative obligations of the ABS, which cover this collection, please see ABS Institutional Environment.</p> |
| Relevance | <p>The proportion of children aged 0-12 years for whom any/additional formal care services was required but were unable to be accessed (formal care includes child care and preschool services) are available by state/territory disaggregation.</p> <p>All data are collected to standard classifications as stated in the CEaCS Explanatory notes</p> |
| Timeliness | <p>The reference period for the 2008 CEaCS data is June 2008 (with reissue 2009) and was published in July 2009. From 1969 to 2005 the ABS conducted 12 Child Care Surveys (CCS) and from 1993 the survey has been run every three years. The ABS plans to conduct this survey again in June 2011.</p> |
| Accuracy | <p>Survey information was obtained through interviews with occupants of 8562 dwellings across Australia. The survey sample size for each jurisdiction was: NSW: 2110; Vic: 1672; Qld: 1557; SA: 877; WA: 1095; Tas: 579; NT: 322 and the ACT: 350. There was an overall reduction in the survey sample from the June 2005 Child Care Survey to the June 2008 CEaCS of 16 per cent. This reduction</p> |

is due in part to the usual sample reductions that occur as part of the LFS redesign following each Census - the redesign based on the 2006 Census was implemented over the period November 2007 to June 2008. After redesign the LFS sample size grows each year as the population grows until the next redesign. A reduction of about 5 per cent in the June 2008 CEaCS sample from the June 2005 Child Care Survey sample is due to this redesign, which generally has no impact on the quality of CEaCS estimates.

Since the estimates in this publication are based on information obtained from occupants of a sample of dwellings, they are subject to sampling variability. That is, they may differ from those estimates that would have been produced if all dwellings had been included in the survey.

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The survey was conducted in both urban and rural areas in all states and territories, but excluded persons living in very remote parts of Australia who would otherwise have been within scope of the survey. The exclusion of these persons will have only a minor impact on any aggregate estimates that are produced for individual states and territories, except in the Northern Territory where such persons account for around 23 per cent of the population.

Non-sampling errors are inaccuracies that occur because of imperfections in reporting by respondents and interviewers, and errors made in coding and processing data. These inaccuracies may occur in any enumeration whether it be a full count or a sample. Every effort is made to reduce the non-sampling error to a minimum by careful design of questionnaires, intensive training and supervision of interviewers, and efficient processing procedures.

Coherence In 2005, the Child Care Survey collected data based on additional care required in the previous 4 weeks. In 2008, the CEaCS collected data based on current or future requirements for additional care. Data are not directly comparable, and care should be taken in interpreting these data.

2005 data report total children who required child care services while data for 2008 include formal child care and preschool combined, as data for child care were too unreliable to be presented separately.

Information about usual child care arrangements and usual preschool attendance is affected by the specific timing of data collection, the age of the child at that time, and state policies on age eligibility for enrolment at school and preschool which affect the likelihood of a child being enrolled at the time of the survey. For information on survey reference week measures, in all states and territories except Tasmania, data were collected on the use of child care and attendance at preschool related to the week prior to the interview (the survey reference week, chosen to avoid school holidays). In Tasmania, where school holidays were earlier than in other jurisdictions, respondents were asked to recall child care usage and preschool attendance related to the period 26 May to 1 June 2008.

The survey excluded people living in very remote parts of Australia which has a significant impact on data from the Northern Territory where this accounts for approximately 23 per cent of the population.

Accessibility Predominantly national level information are published in the CEaCS (Cat. no. 4220.0) on the ABS website. A range of data cubes, with a focus on state/territory level information, is also available on the ABS website. Additional data can be accessed from the ABS. Costs are associated with additional data and vary depending on the type of request.

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Key data

gaps/ issues

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