

Child Measurement Programme for Wales 2021 - 2022

Data quality statement

Summary

This data quality statement relates to information released by the Child Measurement Programme (CMP) for Wales in 2023, including the release of the 2021/22 report. The standards were designed in order to define arrangements that public bodies could adopt to drive improvement in the quality of their data, building confidence in the data used by all public sector bodies and partnerships. While the Audit Commission closed in 2015, the standards are still in use by many public sector bodies. A seventh standard on accessibility has also been included in this statement.

The Audit Commission “Standards for better quality data” 2007

- **Relevance** – *data captured should be relevant to the purposes for which it is used. This entails periodic reviews of requirements to reflect changing needs.*
- **Accuracy** – *data should be sufficiently accurate for its intended purposes. Accuracy is most likely to be secured if data is captured as close to the point of activity as possible. Data should be captured once only, although it may have multiple uses (see section below). The importance of the uses for the data must be balanced with the costs and effort of collection. Where compromises have to be made on accuracy, the resulting limitations of the data should be clear.*
- **Completeness** – *data requirements should be clearly specified based on the information needs of the body and data collection processes matched to these requirements. Monitoring missing, incomplete, or invalid records can provide an indication of data quality and can also point to problems in the recording of certain data items.*
- **Validity** – *data should be recorded in compliance with relevant requirements, including the correct application of any rules or definitions. Where proxy data is used to compensate for an absence of actual data, organisations must consider how well this data is able to satisfy the intended purpose.*
- **Timeliness** – *data should be captured as quickly as possible after the event or activity and must be available for the intended use within a reasonable time period.*
- **Reliability** – *data should reflect stable and consistent data collection processes across collection points and over time. Users of the data should be confident that*

improvements reflect real changes rather than variations in data collection approaches or methods.

Background and purpose

The Child Measurement Programme for Wales (CMP) was established by Welsh Government statute in 2011 and the first annual report was released in 2013. The regulations allow for information to be gathered to inform an annual programme under which children in reception year and year 4 are weighed and measured in schools. Currently this only takes place in reception year.

Impact of COVID-19 pandemic

Reporting of the Child Measurement Programme was severely affected due to the COVID-19 pandemic, as noted for the 2020/21 report, with data only available for two Health Board regions: Swansea Bay University Health Board (UHB) and Aneurin Bevan UHB. Data collection has improved for the 2021/22 report, however, the pandemic impact was still apparent with lower participation in some regions and no data available for Cwm Taf UHB. As a consequence, national figures from 2021/22 are incompatible with previous years, resulting in an omission of 5-year trends from the analysis.

In addition, Local Health Board leads are historically asked to provide assurance to the Child Measurement Programme on training of team members, adherence to the standards and guidelines, and calibration of equipment. Health Board leads were not asked to provide this during the period of the pandemic.

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Relevance – while school age children have been weighed and measured at this age for many years, since 2011 these data have also been used to inform the CMP. Data are entered on the specific CMP module within the National Community Child Health Database (NCCHD) in each Health Board.

The CMP official statistics and report are released in the spring of the calendar year following the end of a completed school year. Therefore, in 2023 the annual report relates to measurements gathered in reception year in schools during 2021/22. The report includes measurements taken on children aged 4 to 5 years, attending mainstream schools in Wales, and with a postcode of residence in Wales.

Prevalence data for BMI categories can be explored by Health Board and Local Authority. Data are also analysed by gender and deprivation. Data on small numbers are suppressed to avoid identification of individuals, in line with information governance and good practice.

Accuracy – measurements are carried out in a standardised way by trained school health team members across Wales. There is an online training package and video clip to enable standardisation of the measurement process. Records from unknown school codes are not included in the analysis. Each year all records, including records from previous years, are analysed from source using a reproducible analytical pipeline.

Where more than one set of measurements is recorded on the database for a single child, only the most recent measurements are included in the analysis. Records are included in the programme if they meet all of the following criteria:

- The location of residence can be determined
- The child is resident in Wales
- The school is located in Wales
- The child was born during the time period relevant for the report.
- The child's gender is recorded (for the purposes of the CMP gender is a binary category, boy or girl).

Eligible records are included in the number measured, if they meet all of the following criteria:

- All required data fields are completed
- The height measurement is recorded and is not an implausible measurement
- The weight measurement is recorded and is not an implausible measurement
- Consent has not been withdrawn
- The measurement was collected during the relevant academic year.

Completeness – Participation is recorded at Health Board and Local Authority level to ensure coverage is within acceptable levels. Due to residual disruptions caused by the COVID-19 pandemic data were not collected across Cwm Taf Morgannwg UHB. Participation data levels were also lower than pre-pandemic levels in several Local Authority areas. The area specific participation levels are available from the participation data tables and are also discussed in the report.

For the 2021/22 report we have also undertaken a Primary Care Cluster level data pilot. For the individual Primary Care Clusters, individual level cluster data were not reported if the participation was lower than 70%. Parents / carers of 191 of the children opted them out of the measurement programme for this year's report. The Health Board level opt out information is available from the participation data table and are discussed in the report.

Validity – the Child Measurement Programme is underpinned by statute which sets out regulations for the collection, collation and analysis. These are disseminated to the Health Boards in Wales by the CMP in the form of the Child Measurement Programme Standards and Guidelines. The representativeness of the 2021/22 data was explored by the Public Health Wales data science team. The exploration concluded that it was reasonable to use the raw unaltered results. The methodology for this exploration is given in the Appendix section of the report.

Timeliness – the measurements are taken at any time during the school year (2021/22). This data are then usually entered onto the National Community Child Health Database before the end of September. However, for the 2021/22 data the deadline for database entry was extended to end October 2022. This was at the request of the Health Board teams due to residual pandemic impact related backlogs.

Each child's date of birth and date of measurement were used to calculate their BMI accurately. The measurements are received as a download, and the data were cleaned and analysed between November 2022 and March 2023. The data were prepared for publication during April and May 2023, with an official statistics publication date pre-announced for 23 May 2023.

Reliability – the data used to inform the CMP annual release are a surveillance bi-product of the data collected from child measurements taken across Wales in this age group. The measurements are taken by staff trained to take the measurements in a standardised way, using equipment that is calibrated annually. The data were received from Digital Health Care Wales (DHCW) in a download. These data were then processed by observatory analysts in the Data, Knowledge and Research directorate of Public Health Wales, with quality checks performed.

Accessibility – the data are made available via a website in both English and Welsh. Data are provided in the form of spreadsheets, with an accompanying report. Commentary is published either in the form of PDFs, or as web text.

For the 2021/22 report there has been a programme of work to improve accessibility across the CMP data products, including the website text, data tables and the report. However, it is acknowledged that further progress to improve accessibility will be required and this will continue as an iterative process for future reports. Not all the data/information will be accessible to people with a visual disability. The analysis and report are not provided in languages other than Welsh and English, however information for parents on the programme itself is available in six community languages and in easy-read format.