

Child Measurement Programme for Wales 2020 - 2021

Data quality statement

Summary

This data quality statement relates to information released by the Child Measurement Programme for Wales in 2022, including the release of the 2020/21 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 has been severely affected due to the COVID-19 pandemic. Children have spent large periods of the 20/21 school calendar being educated from home, and healthcare resources and provisions have been severely limited with a significant focus on COVID-19 support. As a result the collection of data has been sparse across Wales during this period. Therefore data is only presented for Swansea Bay UHB, Aneurin Bevan UHB and their corresponding local authorities. As a consequence, national figures from 20/21 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 this has been done specifically to inform the CMP and data is 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. So in 2022 the annual report related to measurements gathered in reception year in schools during 2020/21. 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, local authority. Data is also analysed by sex and deprivation. Data on small numbers is suppressed to avoid identification of individuals, in line with information governance 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. In 2022 the list of excluded codes was revised and updated. Each year all records, including records from previous years, are analysed from source using a reproducible analytical pipeline.

Where more than one set 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
- They were born during the time period relevant for the report.
- The child's sex is recorded

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 implausible¹ 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 various disruptions caused by the COVID-19 pandemic participation data levels did not meet acceptable levels in 5 of 7 health boards during the reporting period. Two health boards that met acceptable levels of reporting: Swansea Bay UHB, and Aneurin Bevan UHB, 86.7% and 90.5% respectively, were included in the analysis. Within these health boards 9,540 children were measured this year. Parents / carers of 90 of the children opted them out of the measurement programme for this year's report.

Children opted out by Local Health Board	
Swansea Bay UHB	9
Aneurin Bevan UHB	81

- **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.
- **Timeliness** – the measurements are taken at any time during the school year (2020/21). This data is then entered onto the National Community Child Health Database before the end of September. Each child's date of birth and date of measurement is used to calculate their BMI accurately. The measurements are received as a download, and the data cleaned and analysed between October and January, and prepared for publication during February and March. It is then released as Official Statistics in spring of the year following collection.
- **Reliability** – the data used to inform the CMP annual release is collected for the specific purpose of surveillance of child measurements in this age group and recorded on the CMP module of the NCCHD. The measurements are taken by staff trained to take the measurements in a standardised way, using equipment that is calibrated annually. The data

¹ In a very few cases it is apparent that human error results in the wrong figures being entered into the wrong fields. Although it appears as if the height and weight measurements had been switched there is no way to confirm this so measurements are not included.

is received from NWIS in a download. This is then processed by analysts in the Public Health Wales Observatory, and all results are quality checked by other team members.

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

Not all the data/information will be accessible to people with a visual disability. The analysis and report is 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.