

## Child Measurement Programme for Wales 2022 - 2023

### Data quality statement

#### Summary

This data quality statement relates to the 2022/23 data released as an official statistic by the Child Measurement Programme (CMP) for Wales in 2024.

#### Data Standards

This data quality statement is based upon the Audit Commission 'Standards for better quality data' 2007. The standards were designed to define arrangements that public bodies could adopt to drive improvement in data quality and build confidence in the data. 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 standards are defined as follows:

- *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 are captured as close to the point of activity as possible. Data should be captured once only, although it may have multiple uses. 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 public 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 are used to compensate for an absence of actual data, organisations must consider how well these data are 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**

As noted in previous years, data collection was interrupted during the pandemic period with no publication for 2019/2020 and incomplete data published for 2020/21 and 2021/22. Therefore, there are gaps in the time series analysis, and Middle Super Output Area (MSOA) level analyses requiring 5 years rolling data are not available.

## **Data Quality Statement**

### *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 2024 the annual report relates to measurements gathered in reception year in schools during 2022/23. 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 Body Mass Index (BMI) categories can be explored by Health Board, Local Authority and Primary Care Cluster. 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 are 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 by deprivation fifth and at Health Board, Local Authority and Primary Care Cluster level to ensure coverage is within acceptable levels.

Participation data levels have largely now recovered since the pandemic disruption. The area specific participation levels are available from the participation data tables and are also discussed in the report.

Parents / carers of 207 of the children opted them out of the measurement programme for this year's report. The Health Board level opt out information are available from the participation data table and are discussed in the report.

### *Validity*

The CMP is underpinned by statute which sets out regulations for the collection, collation and analysis of the relevant data. 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 (2022/23). These data were then entered onto the National Community Child Health Database before the end of October 2023.

Each child's date of birth and date of measurement were used to calculate their BMI accurately. The measurements are received by Public Health Wales (PHW) as a

download. The data were cleaned, and the analyses planned from November 2023. The main analysis was undertaken between January and March 2024. The data were prepared for publication during April and May 2024, with an official statistics publication date pre-announced for 21 May 2024.

### *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 by PHW from Digital Health and Care Wales (DHCW). These data were then processed by observatory analysts in the Data, Knowledge and Research directorate of PHW, 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 in the form of PDFs, with the key points also added as web text. Since 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, including increasing the volume of web text, will be required. This will continue as an iterative process for future reports. Not all the 2022/23 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.