National Child Measurement Programme

NHS Information Centre

Assessment Report 18  November 2009
National Child Measurement Programme

November 2009
About the UK Statistics Authority

The UK Statistics Authority is an independent body operating at arm’s length from government as a non-ministerial department, directly accountable to Parliament. It was established on 1 April 2008 by the Statistics and Registration Service Act 2007.

The Authority’s overall objective is to promote and safeguard the production and publication of official statistics that serve the public good. It is also required to promote and safeguard the quality and comprehensiveness of official statistics, and good practice in relation to official statistics.

The Statistics Authority has two main functions:
1. oversight of the Office for National Statistics (ONS) – the executive office of the Authority;
2. independent scrutiny (monitoring and assessment) of all official statistics produced in the UK.

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ASSESSMENT AND DESIGNATION

Under the provisions of the Statistics and Registration Service Act 2007, the UK Statistics Authority has a statutory function to assess sets of statistics against the Code of Practice for Official Statistics, with a view to determining whether it is appropriate for the statistics to be designated, or to retain their designation, as National Statistics.

Designation as National Statistics means that the statistics are deemed to be compliant with the Code of Practice. Whilst the Code is wide-ranging, designation may be broadly interpreted to mean that the statistics meet identified user needs; are produced, managed and disseminated to high standards; and are well explained.

Assessment reports will not normally comment further, for example on the validity of the statistics as a social or economic measure; though reports may point to such questions if the Authority believes that further research would be desirable.

Designation as National Statistics will sometimes be granted in cases where some changes still need to be made to meet fully the requirements of the Code, on condition that steps are taken by the producer body, within a stated timeframe, to address the weaknesses. This is to avoid public confusion and does not reduce the obligation to comply with the Code.

Designation is granted on the basis of the information provided to the Statistics Authority, primarily by the organisation that produces the statistics. The information includes a range of factual evidence and also assurances by senior statisticians in the producer organisation. The views of users are also sought. Should further information come to light subsequently which changes the Authority’s analysis, the Assessment report may be withdrawn and revised as necessary.

Once designated as National Statistics, it is a statutory requirement on the producer organisation to ensure that the set of statistics continues to be produced in compliance with the Code of Practice.
1. **Introduction**

1.1 This report is prepared under the provisions of Section 12 of the *Statistics and Registration Service Act 2007*\(^1\). The report covers the set of statistics derived from the National Child Measurement Programme (NCMP) in England, produced by the National Health Service Information Centre for health and social care (NHS IC). NHS IC publishes the results in December each year, within a detailed online report.

1.2 The remainder of this report is structured as follows:

   **Section 2** *Summary of findings*, highlighting the main strengths and weaknesses in relation to the Code of Practice. This summary includes the UK Statistics Authority’s decision in relation to designation as National Statistics.

   **Section 3** *Subject of the assessment*, an overview of the statistics and their history.

   **Section 4** *The Assessment team’s detailed assessment*, providing more details about the assessment of compliance against each principle and protocol of the Code of Practice.

   **Annex 1** *Suggestions for improvement*

   **Annex 2** *Summary of the assessment process and users’ views.*

1.3 This report was prepared by the Authority’s Assessment team, and approved by the Board of the Statistics Authority on the advice of the Head of Assessment.

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2. **Summary of findings**

2.1 **Decision concerning designation as National Statistics**

2.1.1 The Statistics Authority has determined that the NHS IC statistics derived from the NCMP can be designated as a new National Statistics product, subject to the implementation of the enhancements listed in section 2.4 below: recommendations 2 and 4 by the time the next outputs are published (in December 2009) and recommendations 1 and 3 by February 2010.

2.1.2 Designation as National Statistics means that the statistics are deemed to be compliant with the Code of Practice, and thus that they meet identified user needs; are produced, managed and disseminated to high standards; and are well explained.

2.1.3 Designation also signifies that, subject to any caveats in this report, the Statistics Authority judges that the statistics are readily accessible, produced according to sound methods and managed impartially and objectively in the public interest.

2.2 **Summary of strengths and weaknesses**

2.2.1 The statistics derived from the NCMP meet the main user needs, and primary users are well engaged in the Programme. The IC has told us that it is committed to engaging more proactively with external users and will seek feedback about the usefulness and quality of the statistics in future publications.

2.2.2 The commentary in the statistical report is impartial and accessible, with well-presented charts and metadata. The NCMP gives clear methodological information, including information about the data collection and validation processes. However the coverage of the Programme should be more prominent.

2.3 **Detailed recommendations**

2.3.1 The Assessment team identified some areas where it felt that the Information Centre could strengthen its compliance with the Code. Those which the Assessment team considers essential to enable designation as National Statistics are listed in section 2.4 below. Other suggestions, which would improve the statistics and the service provided to users but which are not central to their designation, are listed at annex 1.
2.4 Requirements for re-designation as National Statistics

Requirement 1: Take steps to engage more effectively with users, and make those steps known (para 4.2)

Requirement 2: Ensure the coverage of the Programme, both in terms of geography and type of school, is clearly stated in all published material (para 4.24)

Requirement 3: Develop a data management strategy for archiving the data (para 4.25)

Requirement 4: Publish the name of the responsible statistician in future releases (para 4.31)
3. **Subject of the assessment**

3.1. The National Child Measurement Programme (NCMP) measures and weighs children aged 4-5 (reception) and 10-11 (year 6) in schools in England. Findings from the programme inform the cross-Government strategy for England, *Healthy Weight, Healthy Lives*. The Department of Health (DH) and Department for Children, Schools and Families (DCSF) jointly oversee the strategy. DH began the programme in 2005. It commissioned the NHS Information Centre (NHS IC) to co-ordinate the national programme from 2006/07. The NCMP is now in its fifth year of data collection.

3.2. The Government monitors national progress towards meeting the Public Service Agreement target to improve the health and wellbeing of children and young people (PSA 12) using the Health Survey for England data measuring the proportion of overweight and obese children. PCTs and local authorities use NCMP data to set local goals, and agree them with Strategic Health Authorities and the regional Government Offices. Within the Local Area Agreement (LAA) National Indicator Set (NIS), there are two indicators that focus specifically on child obesity:

- NI 55 – obesity among primary school-age children in Reception Year,
- NI 56 – obesity among primary school-age children in Year 6.

Of the 152 local authorities, 125 included either NI 55 or NI 56, or both, among their chosen 35 targets comprising their LAA for the period 2008/09 – 2010/11.

3.3. Healthcare professionals undertake the measurements in schools. The local Primary Care Trust (PCT) compiles the data through the school year and once a year supplies its validated dataset to NHS IC using a specially designed data capture tool. A child’s participation is voluntary – parents have an opportunity to opt their children out of the programme, and children can choose not to take part. Non-specialist state-maintained schools are required to participate\(^2\), but it is voluntary for other types such as independent schools. In 2007/08, the programme achieved valid measurements for approximately 88 per cent of eligible children.

3.4. NHS IC produces an annual report of headline figures, as well as providing an online database of results by PCT. The National Obesity Observatory (NOO) conducts further detailed analyses using the national dataset and provides guidance to Public Health Observatories to enable regional and local analysis of the data. PCTs and local authorities use the data to support local planning and delivery of services and population level data allows analysis of trends in weight.

3.5. The programme is also a vehicle for engaging with children and families about the issues of maintaining healthy lifestyles and weight. DH has prepared leaflets about the NCMP and what happens when the children are weighed and

\(^2\) Under the National Child Measurement Programme Regulations 2008
measured, as well as ‘top tips’ for helping children keep healthy and eating well. PCTs send out these leaflets with the invitations to participate in the NCMP. They are also now required to offer feedback to parents on the child’s measurements following the introduction of the NCMP Regulations 2008.

3.6. The NCMP was re-licenced for two years by the Review of Central Returns (ROCR) in August 2008. The ROCR scrutinises all proposals that seek to collect data from NHS bodies and makes recommendations based on criteria such as fitness for purpose, costs relative to benefits and impact on frontline staff. The estimated cost is £123,000 based on collection of annual data from 147 PCTs (3 person days each).

3.7. This assessment report does not cover statistics on childhood obesity for the devolved administrations. Scotland, Wales and Northern Ireland do not have an equivalent programme to the NCMP. In Scotland, annual childhood Body Mass Index (BMI) statistics are derived from height and weight measurements collected at routine child health reviews for children in Primary 1 (aged 4 to 6 years) by ten NHS boards, covering around 52% of these children across the country. Similarly the Department of Health, Social Services and Public Safety in Northern Ireland extracts height and weight data provided by the Health and Social Services Boards for children aged between 54 and 66 months on the date of their measurements. The National Public Health Service in Wales has a pilot project for collating childhood height and weight data for all children in reception and year 6. Until the successful completion of that project, childhood BMI is monitored using the Welsh Health Survey.

3.8. Children’s height and weight change at different rates at each age. The internationally accepted practice is to standardise children’s BMI using the growth charts for a reference group. NHS IC uses the 1990 UK Growth Reference Standards produced by combining samples of children in England, Wales and Scotland from separate surveys. The BMI distribution for the reference group gives percentile thresholds of underweight (less than 2%), overweight (greater than 85%) and obese (greater than 95%). The Scottish and Welsh Health Surveys also use the UK Growth Reference Standards. In contrast the Northern Ireland administration uses the International Obesity Task Force standard, established by the World Health Organisation to enable international comparison of childhood obesity.
4. Detailed assessment

Principle 1: Meeting user needs

The production, management and dissemination of official statistics should meet the requirements of informed decision-making by government, public services, business, researchers and the public.

4.1. NHS IC has regular contact with the main users (and suppliers) of NCMP data in DH, NOO and PCTs. It holds weekly meetings with the survey commissioner in DH and has frequent contact with PCTs ahead of and during the period of data supply. It also has discussions with NOO in planning and preparing the annual report and determining future data needs. NHS suppliers and users told the Assessment Team that the NCMP team has a good understanding of their needs.

4.2. NHS IC has not engaged with users of the NCMP data outside the NHS. It has told us that it will try to do so in the future, beginning with a feedback sheet in the 2008/09 report (published December 2009) and on the NCMP website. As part of the designation as National Statistics, NHS IC should take steps to engage more effectively with users, and make those steps known ³ (Requirement 1).

4.3. NHS IC outlines in various material, including the online ‘Frequently Asked Questions’, the use of NCMP data to inform the national and local strategies to reduce obesity among children.

4.4. DH and the NHS IC jointly publish the Programme’s key dates for the local and national data collection, data preparation and report production within a PCT guidance document. NHS IC has brought forward the publication of the report from February (following the collection period September to August) to December in response to regional and local user needs.

³ In relations to Principle 1, Practice 2 of the Code of Practice
**Principle 2: Impartiality and objectivity**

*Official statistics, and information about statistical processes, should be managed impartially and objectively.*

4.5. The Assessment team notes that NHS IC publishes the statistics in an orderly and timely manner via their website, free-of-charge for all. The statistics are also available via a link on the National Statistics Publication Hub and the Department of Health website.

4.6. We consider the statistics to be objective and published without associated policy statements. The statistics are included in an annual report (pdf) file, a database tool presenting local PCT results, and spreadsheets giving detailed tables.

4.7. NHS IC has prepared a revisions policy. Data from the NCMP are not subject to scheduled revisions. NHS IC corrects and flags errors online where required – this has not been necessary for the NCMP to date.
Principle 3: Integrity

At all stages in the production, management and dissemination of official statistics, the public interest should prevail over organisational, political or personal interests.

4.8. NHS IC is an agency funded by DH and is therefore at arm’s length from the main policy processes of central government. The NCMP is overseen through the Cross-Government Obesity Unit, which is jointly led by DH and DCSF. The IC Head of Profession for statistics has responsibility for professional integrity, outlined within the agency’s Statistical Governance Policy4.

4.9. NHS IC publishes a statistical news release to accompany the publication of the statistics, and does not give policy comment. The IC told us that it has not experienced any political interference with the NCMP statistics.

4.10. The PCT data collection guidelines describe the appropriate method of measurement of children in school, undertaken by healthcare professions.

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Principle 4: Sound methods and assured quality

Statistical methods should be consistent with scientific principles and internationally recognised best practices, and be fully documented. Quality should be monitored and assured taking account of internationally agreed practices.

4.11. The methods underpinning the NCMP are consistent with international best practice for the measurement of child Body Mass Index (BMI). The data are standardised using the reference group\(^5\) adopted by the Health Survey for England, which provides an external comparison of the results. The NCMP Report makes no reference to child obesity in other parts of the UK. We suggest that NHS IC refer to the geographic patterns in childhood obesity presented in its report ‘Statistics on Obesity, Physical Activity and Diet’\(^6\), and on the website. We further suggest that NHS IC work with the other UK administrations to produce a sub-set of comparable UK-wide data on obesity in children.

4.12. NHS IC publishes on its website the guidelines that it issues on data measurement, collection and validation for PCTs. It also publishes a guide to data cleaning in an annex to the annual report. This outlines the various stages of quality assurance from the initial data collection through to the final data cleansing within the IC. The annual report also presents an annex giving some quality measures, by PCT, including the overall participation rate and measures of data completeness.

4.13. The Assessment Team notes that NHS IC presents the quality measures clearly and comprehensively. We do, however, suggest that the IC further clarifies the explanation of significant differences between estimates and expands the description of the ‘finite population correction factor’. We also suggest that it makes clear the possible impacts on the results of a two year difference in age across a school year and of the exclusion of children from some independent schools on the published statistics.

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\(^5\) 1990 UK Growth Reference Standards
\(^6\) http://www.ic.nhs.uk/pubs/opadjan08
Principle 5: Confidentiality

Private information about individual persons (including bodies corporate) compiled in the production of official statistics is confidential, and should be used for statistical purposes only.

4.14. NHS IC told us that it follows ONS confidentiality guidance\(^7\). It publishes data in geographies that do not present disclosive information. Guidance to PCTs on data collection requires that no information on a child’s height or weight is given to other children or to school staff, and that all data are held securely and anonymised before sharing with the NHS IC. The data capture tool converts information on home postcode to Lower Super Output Area for supply to the IC.

4.15. NHS IC makes an annual assessment of the risk of disclosure and has concluded that the risk has been minimised by the practice of suppressing any cells with small counts (fewer than five). NHS IC presents on its website the means adopted to protect the confidentiality of the NCMP data.

4.16. NHS IC has prepared a data access and information sharing policy that any third party, such as PHOs, must agree to before they can receive the national dataset. The NHS IC Information Governance team is responsible for handling such requests.

Principle 6: Proportionate burden

The cost burden on data suppliers should not be excessive and should be assessed relative to the benefits arising from the use of the statistics.

4.17. DH, as commissioner of the Programme, considers the costs for data provision as part of its Review of Central Returns (ROCR). NHS IC and DH agree with representatives of PCTs the average cost to PCTs for data provision. The ROCR system seeks to minimise the burden of information demands on NHS bodies and to balance cost versus benefits and impact on frontline staff. The ROCR has re-licenced the NCMP for a further two years.

4.18. NHS IC has sought to minimise the burden on PCTs by providing various tools, such as: a data entry tool for use by the school nurses; a data capture tool for the supply of the PCT dataset to the IC; and most recently, a tool to generate feedback to parents on the measurements for their children. Although the NCMP Regulation 2008 requires PCTs to provide feedback to parents, this is one area of burden raised by suppliers during this assessment. The NHS IC parental feedback tool will help to address this issue by automating the report preparation.

4.19. NHS IC provides advice to PCTs via its telephone support line, particularly required during the annual data upload period. The IC and DH hold an annual workshop with PCTs to explain any changes to the dataset and associated tools. Suppliers told us that they found the workshop very helpful. Some commented that they would like the training, and the distribution of changes to data collection, to be earlier in the year. NHS IC is looking to hold a second workshop to give further training on the NCMP tools to PCTs. It has also developed the capability of reporting on uploaded data in the same way as a PCT provider that enables clearer identification and rectification of errors and queries.
Principle 7: Resources

The resources made available for statistical activities should be sufficient to meet the requirements of this Code and should be used efficiently and effectively.

4.20. The production of these statistics appears to be sufficiently resourced. NHS IC staff told us that they monitor their expenditure regularly and provide updates to the DH commissioner.

4.21. NHS IC follows Government Statistical Service recruitment processes and requires its staff to undertake continuing professional development.
Principle 8: Frankness and accessibility

Official statistics, accompanied by full and frank commentary, should be readily accessible to all users.

4.22. NHS IC publishes statistics on the National Child Measurement Programme in an annual report (in pdf format). The Assessment Team notes that NHS IC presents the statistics clearly through tables, charts and an accessible commentary. It reports the prevalence of ‘obese’, ‘overweight’ and ‘underweight’ children in reception and year 6 by key variables (sex, geographic area, ethnicity, area deprivation and urban/rural classification).

4.23. Data by PCT and Strategic Health Authority are also available through an online database tool which is straightforward to navigate, and through Excel spreadsheets for more detailed analysis.

4.24. We feel that NHS IC does not make it sufficiently clear that the NCMP is for England only and that the results reflect state-maintained schools only. NHS IC should ensure that the coverage of the Programme, both in terms of geography and type of school, is clearly stated in all published material as part of the designation of these statistics as National Statistics8 (Requirement 2). We suggest that NHS IC change the title of the publication to ‘National Child Measurement Programme: England’.

4.25. NHS IC does not currently deposit its final dataset at The National Archive but told us that it is aiming to do this and is determining the appropriate content. As part of the designation as National Statistics, NHS IC should develop a data management strategy for archiving the data9 (Requirement 3).

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8 In relation to Principle 8, Practice 2 of the Code of Practice
9 In relation to Principle 8, Practice 7 of the Code of Practice
Protocol 1: User engagement

Effective user engagement is fundamental both to trust in statistics and securing maximum public value. This Protocol draws together the relevant practices set out elsewhere in the Code and expands on the requirements in relation to consultation.

4.26. The Assessment Team notes that NHS IC clearly signposts users to the various information on the NCMP collection and in ways that are suitable for both NHS and the general public.

4.27. Regular consultation takes place with internal stakeholders. NHS IC has stated its intention to seek feedback from the broader range of users of the NCMP statistics. An invitation for feedback will be published in both the 2008/09 report and on the NHS IC website.

4.28. NHS IC does have a budget for consultations but not specifically for reviewing user views or for the NCMP itself.
Protocol 2: Release practices

Statistical reports should be released into the public domain in an orderly manner that promotes public confidence and gives equal access to all, subject to relevant legislation.

4.29. The 2007/08 annual report is available through the NHS IC website and is accessible through the National Statistics Publication Hub. NHS IC has pre-announced the release of the 2008/09 report on the Publication Hub.

4.30. NHS IC publishes the statistics as soon as practicable – within three months of receiving the data. It succeeded in publishing its second NCMP report two months earlier than previously, in response to user demand.

4.31. NHS IC does not give the name of the responsible statistician in the annual report, but provides general enquiry contact details on the back page of the report. The IC has committed to including the name of the responsible statistician in all its reports in future. This is required for designation as National Statistics10 (Requirement 4).

4.32. NHS IC published online the pre-release access list for the NCMP statistics, with access limited to 24 hours prior to publication. It has also published a statement of compliance with the Pre-release Access to Official Statistics Order 2008, outlining operational arrangements for providing access to its official statistics for briefing purposes.

4.33. Alongside NHS IC’s statistical news release, DH issues a media release which includes comments on the policy aspects of childhood obesity and ministerial statements. We suggest that NHS IC ask DH to label its news release as a policy or ministerial statement to distinguish it from the IC’s statistical news release, and to refer clearly to the data source.

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10 In relation to Protocol 2, Practice 6 of the Code of Practice
Protocol 3: The use of administrative sources for statistical purposes

Administrative sources should be fully exploited for statistical purposes, subject to adherence to appropriate safeguards.

4.34. NHS IC is currently preparing a Statement of Administrative Sources. The NCMP statistics are not compiled from administrative sources.
Annex 1: Suggestions for improvement

A1.1 This annex includes some suggestions for improvement to NHS IC’s National Child Measurement Programme statistics, in the interest of the public good. These are not formally required for re-designation, but the Assessment team considers that their implementation will improve public confidence in the production, management and dissemination of official statistics.

Suggestion 1  Make reference within the NCMP annual report and website to the geographic patterns in childhood obesity statistics in their report ‘Statistics on Obesity, Physical Activity and Diet’ (para 4.11)

Suggestion 2  Work with the other UK administrations to produce a sub-set of comparable UK-wide data on obesity in children (para 4.11)

Suggestion 3  Clarify the explanation of significant differences between estimates and expand the description of the ‘finite population correction factor’ (para 4.13)

Suggestion 4  Make clear the impact on the results of a two year difference in age across a school year, and of the exclusion of children from some independent schools (para 4.13)

Suggestion 5  Change the title of the publication to 'National Child Measurement Programme: England' (para 4.24)

Suggestion 6  Request that DH labels its news release as a policy or ministerial statement and that it clearly refers to the data source (para 4.33)
Annex 2: Summary of assessment process and users’ views

A2.1 This assessment was conducted from July to September 2009.

A2.2 The Assessment team met representatives of NHS IC at an initial meeting in July 2009. Some background information was provided by NHS IC during July, and Written Evidence for Assessment was provided on 4 September. The Assessment team subsequently met with NHS IC during September to confirm and clarify the written evidence provided.

Summary of users contacted, and issues raised

A2.3 The Assessment team received 15 responses from the user and supplier consultation. The respondents were grouped as follows:

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<thead>
<tr>
<th>Group</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central government</td>
<td>1</td>
</tr>
<tr>
<td>Local and regional NHS users</td>
<td>5</td>
</tr>
<tr>
<td>Local NHS suppliers</td>
<td>9</td>
</tr>
</tbody>
</table>

A2.4 Users were satisfied with the accessibility, timeliness, clarity of presentation, and data quality. Some comments received queried the impact of the exclusion of children from independent schools on results for some areas, and the level of detail in the final dataset (such as school, middle super output area, ward, and ethnicity). NHS IC said that they will review the information provided in these areas. Some suppliers highlighted the resource required to collect these data and the time taken to receive answers to queries. Overall, users and suppliers expressed strong support for the collection of these data.

Key documents/links provided

Written Evidence for Assessment document
National Child Measurement Programme, Results for 2007/08
http://www.ic.nhs.uk/ncmp
National Obesity Observatory, Detailed Analysis of the NCMP 2007/08 Dataset