Background data quality report

Statistics on Obesity, Physical Activity and Diet 2017

Published 30 March 2017
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This is a National Statistics publication

National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value.

All official statistics should comply with all aspects of the Code of Practice for Official Statistics. They are awarded National Statistics status following an assessment by the Authority’s regulatory arm. The Authority considers whether the statistics meet the highest standards of Code compliance, including the value they add to public decisions and debate.

It is NHS Digital’s responsibility to maintain compliance with the standards expected of National Statistics. If we become concerned about whether these statistics are still meeting the appropriate standards, we will discuss any concerns with the Authority promptly. National Statistics status can be removed at any point when the highest standards are not maintained, and reinstated when standards are restored.


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This report may be of interest to members of the public, policy officials and other stakeholders to make local and national comparisons and to monitor the quality and effectiveness of stop smoking services.
Introduction

This document constitutes a background quality report for the Statistics on Obesity, Physical Activity and Diet publication.

Background

Context

This annual compendia report presents a range of up-to-date information on obesity, physical activity and diet among both adults and children from a variety of sources, including previously published information from reports such as the Health Survey for England and the National Child Measurement Programme. This report also presents some previously unreported information on prescribing and hospital admissions related to obesity which are datasets managed by NHS Digital.

Some of the areas covered in the report include Body Mass Index (BMI) prevalence, activity levels and fruit and vegetable consumption. The report focuses on England only where possible.

The report is published on the NHS Digital website at: http://digital.nhs.uk/pubs/sopad17

Purpose of document

This paper aims to provide users with an evidence based assessment of quality of the statistical output included in this report.

It reports against those of the nine European Statistical System (ESS) quality dimensions and principles\(^1\) appropriate to this output. In doing so, this meets NHS Digital’s obligation to comply with the UK Statistics Authority (UKSA) Code of Practice for Official Statistics\(^2\), particularly Principle 4, Practice 2 which states:

“Ensure that official statistics are produced to a level of quality that meets users’ needs and that users are informed about the quality of statistical outputs, including estimates of the main sources of bias and other errors and other aspects of the European Statistical System definition of quality”

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\(^1\) The original quality dimensions are: relevance, accuracy and reliability, timeliness and punctuality, accessibility and clarity, and coherence and comparability; these are set out in Eurostat Statistical Law. However more recent quality guidance from Eurostat includes some additional quality principles on: output quality trade-offs, user needs and perceptions, performance cost and respondent burden, and confidentiality, transparency and security.

Assessment of statistics against quality dimensions and principles

Relevance

This dimension covers the degree to which the statistical product meets user needs in both coverage and content.

This publication is considered to be of particular interest to NHS and independent sector providers in England and to English NHS commissioning organisations. However, data and findings are likely also to be of interest to a much broader base of users.

Accuracy and reliability

This dimension covers, with respect to the statistics, their proximity between an estimate and the unknown true value.

This report is a National Statistic and is produced according to the Code of Practice for Official Statistics.

Most of the information in this report has been previously published. The sources of the information are trusted sources; the majority being either National or Official Statistics. Most sources referenced in this report include a Methodology section for further information.

Hospital admissions data

The data presented in this report are for inpatients only. Outpatient procedures are not included in these figures due to the primary diagnosis code being poorly populated, and there being no certainty that procedures are for obesity diagnoses.

Further general information on HES data quality can be found here:


HES Data Quality Notes, which highlight any specific known issues with the data, are available here:


Prescription data

Data on the number of prescription items and Net Ingredient Cost (NIC) for drugs prescribed for obesity give a measure of how often a prescriber writes a prescription and it is not an ideal measure of the volume of drugs prescribed as different practices may use different durations of supply. The NIC is the basic cost of a drug as listed in the Drug Tariff or price lists; it does not include discounts, prescription charges or fees.

NHS Prescription services have coded Mazindol within BNF section 4.5 Drugs used in the treatment of obesity, but as prescription data has no information as to why it was prescribed it cannot be stated it was definitely used for the treatment of obesity in this
instance. Consequently Mazindol has been excluded, from prescribing data since 2012. The number of data items affected is very small and has a negligible effect on the totals overall.

**Survey data**

Some of the information presented in the report is taken from survey data. Sometimes the mode of data collection used in a survey can have an impact on how respondents answer the questionnaire. For example, surveys conducted via a face-to-face interview such as the Health Survey for England (HSE) provide an opportunity for an interviewer to use a computer to record the respondent’s answers which will improve the quality of the data by ensuring all the questions are completed and not allowing any invalid answers. By comparison data collected via a postal survey such as What About Youth (WAY) will have none of these inbuilt validations.

Face-to-face interviews also provide an opportunity to guide the respondent through any interpretation issues such as advice on portion sizes, which is more difficult in a face-to-face interview.

Both modes however may suffer from respondents being tempted to give answers which are considered to be more socially acceptable. This could occur either through the surveys being completed in the home when other family members are present, or through the interviewer being present at a face-to-face interview. However, HSE does include some information such as height and weight (and therefore BMI), and blood pressure which are measured by a nurse and therefore not affected in the same way as the respondent’s answers.

**Timeliness and punctuality**

*Timeliness refers to the time gap between publication and the reference period. Punctuality refers to the gap between planned and actual publication dates.*

This compendia report is published annually and presents or signposts the most up-to-date information available.

**Accessibility and clarity**

*Accessibility is the ease with which users are able to access the data, also reflecting the format in which the data are available and the availability of supporting information. Clarity refers to the quality and sufficiency of the metadata, illustrations and accompanying advice.*

The report is accessible on the NHS Digital website as a PDF document. All tables in the report are provided in Excel format and as csv files, as part of the government’s requirement to make public data public.

The publication may be requested in large print or other formats through the HSCIC’s contact centre: enquiries@nhsdigital.nhs.uk (please include ‘SOPAD’ in the subject line).
Coherence and comparability

Coherence is the degree to which data which have been derived from different sources or methods but refer to the same topic are similar. Comparability is the degree to which data can be compared over time and domain.

Obesity related hospital admissions

HES data is available from 1989-90 onwards.

Changes to the figures over time also need to be interpreted in the context of improvements in data quality and coverage (particularly in earlier years), improvements in coverage of independent sector activity (particularly from 2006-07) and changes in NHS practice.

Some of the changes over time are due to changes in practice as to whether bariatric procedures are carried out in outpatient or inpatient setting (The data presented in this report are for inpatients only). Such changes known to us that have a significant effect on the regional and/or national totals are as follows:

2013/14

Derby Hospitals NHS Foundation Trust recorded a decrease of 739 inpatient bariatric surgical procedures in 2013/14 mainly due to gastric band maintenance procedures which was nearly half of the decrease seen on the national figures (down 1,640). This Trust also recorded 594 procedures in outpatient settings in 2013/14 with a primary procedure code of gastric band maintenance compared to none in 2012/13.

2015/16

Heartlands hospital (RR1) recorded the majority of their gastric band maintenance procedures as inpatient activity compared to outpatient activity in 2014/15. This led to an increase in gastric band maintenance from 1 in 2014/15 to 278 in 2015/16 which accounted for over two-thirds of the increase seen at national level.

Changes to bariatric surgery procedure codes

In 2012/13, changes were made to give a standard definition of “bariatric surgery” using the same methodology as Healthcare Resource Groups (HRGs). The new HRGs were created in 2011/12 Reference Costs collection as a result of work between the National Casemix Office at NHS Digital, the British Obesity and Metabolic Surgery Society (BOMSS) and the Chapter F Digestive System Expert Working Group (EWG). This definitional change has a minimal effect on the previous years’ data; between 20 and 30 cases a year from 2009/10 onwards when OPCS 4.5 and 4.6 codes were used, following on from the introduction of a specific code for maintenance of gastric band in OPCS-4.5 in 2009/10. Appendix B shows the current list of OPCS codes included in the definition of bariatric surgery.

More information on the change of codes in 2012/13 is included in the methodological change notice at:

Changes to the calculation of hospital admission rates

Admission rates per head of population (tables 3, 4, 7, 8, 11 and 12) were changed in the 2017 report to be age standardised based on the European Standard Population. Prior to 2017, these rates were not standardised. More information is available from the methodological change notice at:


Trade-offs between output quality components

This dimension describes the extent to which different aspects of quality are balanced against each other.

Most previously published sources referenced in this report include a methodology section which will contain specific information about trade-offs.

New analyses by NHS Digital consist of HES statistics. HES data quality information, including details of trade-offs, is available here:


Assessment of user needs and perceptions

This dimension covers the processes for finding out about users and uses and their views on the statistical products.

The compendia reports on drug misuse, alcohol, smoking and obesity were subject to a National Statistics consultation in 2016. The report on the findings of the consultation and the NHS Digital response are available at:

http://content.digital.nhs.uk/article/6770/Consultation-on-Lifestyles-Compendia-Reports

NHS Digital is keen to gain a better understanding of the users of this publication and of their needs; feedback is welcome and may be sent to enquires@nhsdigital.net (please include ‘SOPAD’ in the subject line).

Performance, cost and respondent burden

This dimension describes the effectiveness, efficiency and economy of the statistical output.

All data used within this report is either already published or is part of an existing dataset. Therefore there are no data collected specifically for this report.
Confidentiality, transparency and security

The procedures and policy used to ensure sound confidentiality, security and transparent practices.

Some of the data contained in this publication are National Statistics. The code of practice for official statistics is adhered to from collecting the data to publishing.


Statistical Governance Policy


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http://content.digital.nhs.uk/foi

Statement of Compliance with Pre-Release Order


Small Numbers Procedure

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