This report highlights aspects of quality and methodology that users may consider when interpreting results of the Adult Psychiatric Morbidity Survey (APMS) 2014. The APMS 2014 is the fourth in a series of national mental health surveys. Information contained within this report should be considered alongside the Methods chapter of the survey report.
Contents

This is a National Statistics publication 3

Background 4

Background 4
Relevance 5
Accuracy and reliability 7
Timeliness and punctuality 8
Accessibility and clarity 9
Coherence and comparability 9
Trade-offs between output quality components 10
Assessment of user needs and perceptions 10
Performance, cost and respondent burden 11
Confidentiality, transparency and security 11
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.

Statistics relating to autism in this report are experimental. Experimental statistics are official statistics which are published in order to involve users and stakeholders in their development and as a means to build in quality at an early stage. It is important that users understand that limitations may apply to the interpretation of this data. More details are given in the autism chapter of this report.


ISBN 978-1-78386-825-4

The APMS report may be of interest to members of the public in understanding aspects of mental health and wellbeing in England. Policy officials, mental health service commissioners and providers may use this report to understand the level of need for treatment and the characteristics of people who may use these services.
Background

The APMS 2014 is the fourth in a series of national mental health surveys. Each survey involved interviewing a large stratified probability sample of the general population, covering people living in private households. The full adult age range was covered, with the youngest participants aged 16 and the oldest over 100. The two-phase survey design involved an initial interview with the whole sample, followed up with a structured assessment carried out by clinically trained interviewers with a subset of participants. The survey was commissioned by NHS Digital, funded by the Department of Health, and carried out by NatCen Social Research (NatCen) and the University of Leicester.

People were assessed or screened for a range of different types of mental disorder, from common conditions like depression and anxiety disorder through to rarer neurological and mental conditions such as psychotic disorder, attention-deficit/hyperactivity disorder (ADHD), and autism spectrum disorder (ASD). The long questionnaire also covered many aspects of people's lives that are linked to mental health, and this information can be used to profile the circumstances and inequalities experienced by people with mental disorders.

This section aims to provide users with an evidence based assessment of the quality of the statistical output of the APMS 2014 publication by reporting against those of the nine European Statistical System (ESS) quality dimensions and principles appropriate to this output.

In doing so, this meets our obligation to comply with the UK Statistics Authority (UKSA) Code of Practice for Official Statistics, 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".

This section briefly describes how each of the nine quality dimensions applies to the publication. We will continue to provide clear and comprehensive information about the methods used in our analysis and the quality of the data to assist users in interpreting our reports.
Relevance

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

From our engagement with customers, we know that there are many users of these statistics. They are used by the Department of Health (DH), Public Health England (PHE), NHS organisations, charities, academics, the public and the media. Uses of the data include: informing and monitoring policy; monitoring the prevalence of health or illness and changes in health or health related behaviours; informing the planning of services; and writing media articles. Universities, charities and the commercial sector use the data for health and social research. The survey data are also used for teaching purposes and by students in their work.

User needs have been gathered and considered at all points in the collection and publication of this information. This has been guided by a steering group consisting of representatives from NHS Digital, DH, PHE, NHS England, the Department of Experimental Psychology, University of Oxford, the Well-Being Programme, the Mental Health Foundation, London School of Economics, NatCen and the University of Leicester.

The APMS has been presented at 24 conferences and in various meetings, roundtables and committees since the last survey in the series, the outcomes of which have informed the development of the 2014 survey and the resulting reports. Fuller details of the uses of APMS data can be found on the NHS Digital website\(^1\) and details of secondary uses of data from the APMS series can be found in Appendix A of this publication. We will update the NHS Digital website with details of further uses of APMS 2014 data as details become available. Feedback and suggestions on the content, scope and reporting for APMS 2014 were received from various users and stakeholders. These are documented on the NHS Digital website together with the NHS Digital response\(^2\).

All information used in this publication is taken from APMS respondents. All surveys are subject to bias. Some people, for example those who live in an institution, could not have been selected to take part. Non-response means that some selected households or individuals could either not be contacted or refused to take part. Others may not have been well enough or may have lacked the cognitive capabilities to complete a long survey interview. Social desirability biases may mean some people, especially in the face-to-face section of the interview, did not answer fully or honestly. These limitations, while ameliorated to some extent with use of validated measures, self-completion data entry, weights, understanding of the population they relate to and how the data should appropriately be applied, should be

---

acknowledged. The strengths and limitations of this information, detailed information on the survey methodology, and how the statistics in this report should be interpreted in light of this methodology are summarised in the Introduction and can be found in more detail in the Methods chapter of this publication. Quality issues particular to individual topics covered in this publication can be found in the relevant topic-specific chapter.

Descriptions of concepts and terms used in this publication can be found in the Glossary. Key definitions and ideas can be found in the ‘Notes on the data’ section of the Executive Summary.

The purposes of the survey, agreed following user engagement and guided by the steering group, were:

- To estimate the prevalence of a range of types of common and rare mental disorders in the population.
- Measure the gap between presence of each disorder and receipt of treatment.
- Produce trends in disorder and treatment through comparisons with previous surveys in the series.
- Enable the circumstances of people with different mental disorders to be compared with those of people without disorder.

For the purpose of determining the presence of mental disorders the mental health assessments used are not as reliable as a clinical interview. In a clinical interview, a trained psychologist or psychiatrist may take many sessions and much explorative questioning and clinical judgement to reach a diagnosis. In the context of a questionnaire administered by a lay interviewer, this is not possible. However, the assessments used have been validated and are among the best available for the purpose in hand. Detailed information on the assessments used can be found in the ‘Topic coverage’ section of the Methods chapter. Any considerations users should be aware of when interpreting the results of specific assessments are detailed in the relevant topic-specific chapters. Details of the steps completed in the assessment and revision of methodologies used in the collection and interpretation of this information can be found in the ‘Piloting and questionnaire development’ section of the Methods chapter.

We try to engage with people to gain a better understanding of the uses and users of these statistics and to ensure they remain relevant and useful. A consultation on the survey and its outputs will be launched soon after publication. As well as providing feedback on the 2014 survey, the consultation findings will inform the design, content and reporting of any future survey. The findings from the consultation will be published on the NHS Digital website.

Feedback and suggestions received after the consultation will still be collated and published by NHS Digital and considered in the

---

development of any future APMS surveys. Feedback is very welcome at any time via enquiries@nhsdigital.nhs.uk (please quote ‘Adult Psychiatric Morbidity Survey’ in the subject line).

**Accuracy and reliability**

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

As the data are based on a sample (rather than a census) of the population, the estimates are subject to sampling error. The APMS 2014 used a clustered, stratified multi-stage sample design and in addition, weights were applied when obtaining survey estimates. One of the effects of using the complex design and weighting is that standard errors for survey estimates are generally higher than the standard errors that would be derived from an unweighted simple random sample of the same size. The calculation of standard errors and comments on statistical significance has been included in the report, all of which have taken into account the clustering, stratification and weighting of the data.

Details of the sample design, response rates, survey methods, design effects, sampling errors, measurement errors and activities undertaken to understand and address sources of error, including piloting and cognitive testing of individual survey elements, are available in the Methods chapter of the publication.

For some of the low prevalence disorders the uncertainty in how reflective the estimates produced are of the resident population is relatively large compared to size of the estimate. For these disorders particularly the prevalence estimate must be understood to sit inside confidence intervals, giving a range of likely true prevalence values for the population. For example, within the Personality Disorder chapter it is reported that 3.3% of the respondents aged between 18 and 64 in this survey screened positive for Antisocial Personality Disorder. The confidence intervals for this figure are given as 2.8% and 4.0%. This means that, given 3.3% of those surveyed screened positive for this disorder, there is a 95% chance that the true value of the percentage of 18 to 64 year olds in England with this disorder at the time the survey was taken lay somewhere between 2.8% and 4.0%. Conversely there is a 5% chance that the true value for the population was smaller than 2.8% or larger than 4.0%.

Given the small number of respondents screening positive for certain low prevalence disorders from certain groups within the population (for example, as being within a certain ethnic group) the results of the survey may not find significant differences between estimates for these groups if the true differences are relatively small.
Methods used to limit the likelihood of errors being introduced in the data capture, preparation and analysis stages of the production of this publication are detailed in the ‘Quality assurance’ section of the Methods chapter. Further information regarding NatCen’s quality assurance policies can be found at:

http://natcen.ac.uk/about-us/commitment-to-quality/

As with all NHS Digital publications this publication has been subject to the NHS Digital Statistical Governance Policy[^4], section 8 ‘Policy on Principle 4: Sound Methods and assured Quality’ of which details NHS Digital’s roles and responsibilities in quality assuranceing the methods and results of this publication. Quality assurance of methods and production standards began at the procurement stage in 2012 with detailed quality standards and requirements being included in a detailed specification. Following the award of the contract to NatCen and the University of Leicester ongoing quality assurance of methods was incorporated into regular contract management meetings and engagement with NHS Digital. Methods were also informed by the APMS Steering Group and an APMS Academic Group, drawing on the expertise of leading academics from a range of universities and medical schools. Further details on the quality assurance of the methods used in this publication can be found in the ‘Piloting and questionnaire development’ section of the Methods chapter.

Prior to publication the results of APMS 2014 were subject to further quality assurance by NHS Digital, for example in checking for internal consistency, spotting any errors, ensuring that the report is clear and understandable and describes the data appropriately and objectively. This involved NHS Digital being provided with at least three draft versions of each chapter within the publication alongside associated reference tables, and having the opportunity to comment on all aspects of the report at each stage. Statistical analysis within the publication was reviewed by Grade 7-equivalent members of the Government Statistician Group[^5] within NHS Digital to ensure that the statistical methods used are appropriate and that results of these analyses are discussed correctly. All aspects of the publications were reviewed and approved by the Responsible Statistician for this publication prior to release.

**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 publication forms the fourth release in the APMS series, with data collection taking place every seven years since 1993. Fieldwork for this survey took place during 2014 and 2015 with these results made available as soon as practicable after the data collection.

[^5]: https://gss.civilservice.gov.uk/about/
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 published online and is available free of charge. Excel tables are included with associated reference data, published alongside a non-proprietary Excel file viewer. An anonymised version of the survey dataset will be made available for analysis within three months of publication via the UK Data Service website at:

http://ukdataservice.ac.uk/

Information on how users should interpret the results within this publication can be found in the Glossary, the Methods chapter, and in the individual themed chapters (for theme-specific guidance). Also within the individual themed chapters are numerous references to other sources of information where users can find more information on the topics covered.

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.

This is the fourth survey in the APMS series. Certain core themes and methodologies have been kept consistent or comparable throughout the survey series in order to provide a consistent time series for core mental disorders. Full details of the content of the 2014 survey and its comparability with previous surveys can be found in the ‘Topic coverage’ section of the Methods chapter, particularly within the ‘Coverage of the 1993, 2000, 2007 and 2014 APMS interviews’ and ‘Key variations across the survey series’ sub-sections.

The comparability of the results in this publication with other studies conducted nationally and internationally, where such studies are available, is discussed in each topic-specific chapter. These comparisons are mainly outlined in the Introduction and Discussion sections of each chapter, but also highlighted throughout where appropriate. For example, page 6 of the Alcohol chapter outlines statistics from the Health Survey for England6 and other studies in order to compare with and interpret the results from the APMS. Similarly, page 4 of the Personality Disorder chapter outlines the prevalence estimates of Antisocial Personality Disorder derived from other international studies in order to compare with the results of the APMS 2007 and APMS 2014 results. While similar national mental health and wellbeing prevalence surveys are not currently conducted in parts of the UK other than England, where relevant studies are

6 http://digital.nhs.uk/healthsurveyengland
available from other parts of the UK for comparison these are
discussed in the theme-specific chapters.

**Trade-offs between output quality components**

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

Within this publication different aspects of quality have been balanced
against each other in order to best meet the aims of the survey. For
example, in order to best understand the prevalence of common and
rare mental disorders in the population a survey of the resident
population has been used. This allows for the results of this survey to
be used to examine the ‘treatment gap’. That is, the survey data can be
used to explore what proportion of people with a condition are not in
contact with services nor in receipt of any treatment, or who are in
receipt of inappropriate treatment. This information would not be
available if other methods of collection were used, such as sampling
from lists of patients in contact with mental health services, or patients
registered with a general practitioner.

This approach has quality implications for other survey aims. For
example, a survey of the resident population excludes those who were
living in institutional settings such as large residential care homes,
offender institutions, prisons, in temporary housing (such as hostels or
bed and breakfasts) or sleeping rough. As discussed in this publication,
people living in such settings are likely to have worse mental health
than those living in private households, which may have an effect on
the quality of the prevalence estimates produced by this survey.
However, the proportion of the overall population not living in private
households is so small that this would have little (or no significant)
impact on the prevalence estimates for the disorders examined on
APMS, as such the decision was made that the improvement in the
survey’s ability to provide an estimate of the treatment gap justified this
trade-off between these two survey outcomes. Details of the strengths
and limitations of the results of this survey are summarised in the
Executive summary of this publication, and detailed in full in the
Methods chapter.

**Assessment of user needs and perceptions**

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

From our engagement with customers, we know that there are many
users and uses of these statistics. Details of these uses and users
have been included in the ‘Relevance’ section of this Data Quality
Statement, along with details of previous and future consultation on this
survey series. Regular consultation with customers and stakeholders is
undertaken to ensure that developments introduced to this publication
and other NHS Digital publications meet their requirements.
Performance, cost and respondent burden

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

Data for the APMS 2014 were collected from the population living in private households in England. Due to the scale of this collection it is currently carried out once every seven years.

As with all previous surveys the APMS 2014 involved a stratified random probability sample of households. One adult aged 16 years or over was randomly selected for interview in each eligible household. Given the length of the interview process, interviewing one household member helped to reduce the burden placed on each household. The two-phase survey design involved an initial interview with the whole sample, followed up with a structured assessment carried out by clinically trained interviewers with a subset of participants. The achieved sample for the first phase of the 2014 survey was 7,546 adults (aged 16 and over), a response rate of 57%. 875 of these were selected for the second phase interview, 630 (72%) of whom were interviewed. Full details of the survey methodology and associated burden can be found in the Methods chapter of this publication.

Confidentiality, transparency and security

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

No personal/individual level information is received by NHS Digital or contained in the report. Information is presented at a high level of aggregation. As for all NHS Digital publications the risk of disclosing an individual’s identity in this publication series has been assessed and the data are published in line with a Disclosure Control Method for the dataset.

Please see links below to relevant NHS Digital policies:

Statistical Governance Policy (see link in ‘user documents’ on right hand side of page)

digital.nhs.uk/pubs/calendar

Freedom of Information Process

digital.nhs.uk/foi

A Guide to Confidentiality in Health and Social Care

digital.nhs.uk/confguideorg

Privacy and Data Protection

digital.nhs.uk/privacy