Background Quality Report: Routine Quarterly Mental Health Minimum Dataset Reports – Final Q1 and provisional Q2 2011/12 summary statistics and related information

The Health and Social Care Information Centre[1] is England's central, authoritative source of health and social care information.

www.ic.nhs.uk

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[1] Formerly known as 'The NHS Information Centre'

Contents

Introduction

This document constitutes a background quality report for the publication of quarterly data from version 4 of the Mental Health Minimum Dataset (MHMDS) and data from the Community Mental Health Activity (Community MHA) Omnibus return. The statistics included in this release are:

MHMDS indicators– Q1 final data, Q2 provisional data;
MHMDS organisational data quality reports – Q1 final data
Community activity indicators – Q2 final data, Q3 provisional data

Context

Background to this publication

MHMDS indicators

The MHMDS is returned quarterly by all NHS providers of adult secondary mental health services and from Q1 should include all activity from independent sector providers contracted by the NHS (although, to date, the number of organisations actually submitting this mandatory return has been low). It is received as record level anonymised data from patient administration systems, Care Programme Approach systems and Mental Health Act administration systems.

It contains records relating to all adults aged 18 or over (including elderly adults) who receive NHS funded specialist secondary mental health services and are, or are thought to be, suffering from a mental illness. Children and adolescents under the age of 18 should also be included where they are in receipt of care from a specialist adult secondary mental health service or an early intervention service.

Further information on the MHMDS can be found on the Health and Social Care Information Centre (HSCIC) website at: www.ic.nhs.uk/services/mhmds/spec

Following recommendations from the Mental Health Information Review in 2008, version 4 of MHMDS was implemented in April 2011 to support the introduction of 'Payment by Results' and to better reflect the current configuration of mental health services. From Q1 2011 providers make their quarterly MHMDS submissions via the Bureau Service Portal on Open Exeter[2] and a new system for processing the data has been implemented. Full details of the underlying methodology are provided in the MHMDS Version 4 User Guidance and Appendices.

The Information Standards Notice for MHMDS version 4 can be found on the Information Standards Board website at:

http://www.isb.nhs.uk/documents/isb-0011/amd-22-2011-version-4-0-uplift-to-specification/index_html

This routine quarterly publication aims to provide the Department of Health (DH), Mental Health services, commissioners and members of the public with information about NHS funded specialist mental health services for adults. The MHMDS reports now include a number of indicators sourced

[2] Further details on how to access the Open Exeter portal can be found here :

http://www.ic.nhs.uk/services/mental-health/using-the-service/datasets-databases-and-data-collections/mental-health-minimum-dataset-mhmds/mhmds-submissions-via-the-bureau-service-portal

from MHMDS which are part of the DH's performance framework for mental health trusts, e.g. the Department of Health's Service Performance Framework[3,4] and the NHS Operating Framework[5].

The DH has revised the Indicator constructions since 2010/11 and details can be found here:

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_126848

Community Mental Health Activity

The release also includes data from the Community Mental Health Activity (Community MHA) Omnibus return which is collected from commissioners. Information about community mental health teams has been collected by the Department of Health via the UNIFY2 system since 2003 as part of the Local Delivery Plan Returns (LDPr)[6]. Following a change in remit for the LDPr, the DH arranged for the NHS IC to collect and publish essential data on community activity. Five indicators are being collected quarterly via the NHS IC online Omnibus system. A further three will be collected via Omnibus on an annual basis during Quarter 4 only. More information about this collection can be found at:

http://www.ic.nhs.uk/services/omnibus-survey/using-the-service/data-collections/community-mental-health-activities

It is possible that elements of this set of reports will be produced from MHMDS version 4 in future.

The remaining LDPr lines will continue to be collected by via UNIFY2 and published by the DH.

[3] The NHS Performance Framework: Implementation Guidance - 2011/12
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_126030

[4] The NHS Performance Framework: Application to Mental Health Trusts in 2011/12:
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_126848

[5] NHS Operating Framework:
http://gp.dh.gov.uk/2011/11/24/the-operating-framework-for-the-nhs-in-england-201213-published/

[6]Department of Health Mental Health Community Teams Activity:
http://www.dh.gov.uk/en/Publicationsandstatistics/Statistics/Performancedataandstatistics/MentalHealthCommunityTeamsActivity/index.htm

Purpose of this document

This paper aims to provide users with an evidence based assessment of the quality of the statistical output of the accompanying routine quarterly MHMDS quarterly reports publication by reporting against those of the nine European Statistical System (ESS) quality dimensions and principles[7] 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[8], 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.*

[7] 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.

[8] UKSA Code of Practice for Statistics:

http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html

Assessment of statistics against quality dimensions and principles

Relevance

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

For MHMDS, this publication covers the Q2 (July 1st to September 30th) and Q1 2011/12 (April 1st to June 30th) reporting periods and comprises a set of reports which have been produced from mental health providers' MHMDS submissions processed by the Systems and Service Delivery team at Connecting for Health on behalf of the HSCIC.

The publication also includes Community Mental Health Activity Returns submitted by commissioners. The latter are being published in part to respond to stakeholder (DH) needs but also because we felt that their inclusion will be of wider use as some of these measures could potentially be produced from MHMDS in future. 2011/12 community information comprises final data from the Q2 (July to September) 2011 reporting period and provisional data from the Q3 (October to December) 2011 reporting period.

This publication contains organisation level statistics for MHMDS indicators, and both organisation and SHA level statistics for community data. A full list of tables, together with further information about terminology and derivations can be found in the Executive Summary Report and the Reference Data Tables of this publication.

More comprehensive MHMDS organisational data quality reports, which provide counts of valid records for a selection of data items in the MHMDS by organisation, are included as part of this publication.

'Breach' reasons (explanations provided by submitting organisations in response to Omnibus collection system validation routine flags) are published for community activity data alongside this release.

Accuracy and reliability

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

Accuracy

MHMDS statistics

MHMDS is a rich, person level dataset that records packages of care received by individuals in contact with NHS funded specialist health services and these packages of care vary widely. This means that each record contains different elements of the dataset. It is also an area where there have been frequent changes in service models and organisational changes, such as mergers. So no single approach can measure the completeness and accuracy of the data collected and reported nationally. However the Health and Social Care Information Centre (HSCIC) provides a number of measures and metrics to support assessment of the quality of the data, including:

- Organisation level data quality measures (reports) that validate a selection of key data items, by provider - final data, part of the quarterly publication
- A list of providers who have returned data, by release date and by submission type (primary or refresh) - part of the quarterly publication

- This background quality report - includes known data quality issues affecting the analysis in the release and is produced each time as part of the quarterly publication
- Further metrics are available to users of record level MHMDS data extracts to support further analysis of the dataset.

Users of the data must make their own assessment of the quality of the data for a particular purpose, drawing on these resources. In addition, local knowledge - or other comparative data sources - may be required to distinguish changes in volume between reporting periods that reflect changes in service delivery from those that are an artefact of changes in data quality. Such issues should be borne in mind when viewing time series analysis as year-on-year changes may sometimes be a product of shortfalls in earlier years and should not automatically be interpreted as trends in treatment practice or activity.

It should also be noted that England level counts (and rounded counts where suppression at organisation level has been applied) are calculated as a sum total of organisational totals so there is a possibility of double counting.

Community Mental Health Activity

The community activity data is part of an established collection and it is expected that the data is representative.

Reliability/Known data quality issues

MHMDS Indicators

Coverage

The final data for Q1 consists of data submitted by 66 organisations, including 2 independent sector provider(s). This included refresh data submitted by 57 organisations (see quarterly statistics for list of organisations and submission types).

At the deadline for the Q2 primary (provisional) submission, 59 organisations had submitted data, including 1 Independent Sector Provider.

Only a small proportion of eligible independent sector providers are currently submitting MHMDS and so their data provides limited coverage of the sector that may not be representative.

Users of the statistics should be aware of the following issues relating to individual organisations' submissions:

Q1 data

- Some organisations which returned annual data for 2010/11 merged before the Q1 2011/12 period and their returns are now submitted via their new administrators. These were:

  - Barnsley PCT (5JE) – now part of South West Yorkshire Partnership NHS Foundation Trust (RXG)
  - Southampton City PCT (5L1) – now part of Solent NHS Trust (R1C)
  - Herefordshire PCT (5CN) – now part of Worcestershire Mental Health Partnership NHS Trust (RWQ)

- These organisations were expected to submit in Q1 but due to administrative or technical reasons, failed to do so successfully:

  - North Essex Partnership NHS Foundation Trust (RRD)

- Derbyshire County PCT (5N6)
- North East Lincolnshire Care Trust Plus (TAN)
- Cygnet Health Care Ltd (NMJ)
- Priory Group Ltd (NTN)

Q2 data

- Some organisations have merged during the quarters covered by this release. In each case two organisations made separate submissions for Q1 data but their Q2 data was made as one submission. These were:

  - Dorset PCT (5QM) – from Q2 part of Dorset Healthcare University NHS Foundation Trust (RDY)
  - Wolverhampton City PCT (5MV) – from Q2 part of Black Country Partnership NHS Foundation Trust (TAJ). See below for further information regarding the TAJ return.

- Worcestershire Mental Health Partnership NHS Trust (RWQ) submitted in Q1, but in Q2 is a new organisation - Worcestershire Health and Care NHS Trust (R1A).

- An error in the upload process for two organisations, Black Country Partnership NHS Foundation Trust (TAJ) and North Essex Partnership NHS Foundation Trust (RRD), resulted in incomplete submissions for these organisations in Q2 (which will be corrected for the refresh submission). Whilst the data is incomplete and this affects denominator and numerator values, the indicator values may nevertheless be representative of the organisation's performance.

- Some organisations experienced difficulties in meeting the submission deadlines via the new portal either for administrative or technical reasons. The following organisations were expected to submit a Q2 primary file, but did not to do so. They have an opportunity to submit a Q2 refresh file in the next submission period:

  - Barnet, Enfield & Haringey MH NHS Trust (RRP)
  - Devon Partnership Trust (RWV)
  - Isle of Wight PCT (5QT)
  - Milton Keynes PCT (5CQ)
  - Humber NHS Foundation Trust (RV9)
  - Derbyshire County PCT (5N6)
  - North East Lincolnshire Care Trust Plus (TAN)
  - Cygnet Health Care Ltd (NMJ)
  - Priory Group Ltd (NTN)
  - St. Andrew's Healthcare (NYA)

Volume of records - Processing

Since the initial publication of version 4 MHMDS statistics, we have been investigating the overall increase in the number of records produced by version 4 processing compared with version 3, which was used for submissions prior to 2011/12. There is some anecdotal evidence that the previous system dropped some records and so this may indicate an improvement in accuracy.

The legacy system for assembling MHMDS version 3 records ('the assembler') included a routine for automatically closing spells where there was no activity for 6 months. During the design phase of version 4 MHMDS it was agreed with the data providers that spells would no longer be closed automatically and an explicit discharge date would be required in the data. The initial investigations into the increase in records suggests that MHMDS data now includes spells where there has been no face to face contact for several months and this may account for the increase in the number of records produced by the new processing arrangements (although it is not necessarily the only reason).

It is clinically accepted that some spells of care can last for months or years without frequent contact, however providers will need to ensure that their submissions only include information for patients who are still considered to be on the caseload, even if contact is infrequent, and that a discharge date is provided for referrals to the service that have now ended.

Providers receive a variety of metrics as part of the submission process which enables them to review their submissions to ensure that patients whose data is submitted are still part of their active case list. The increase in record volumes, due to a change in processing arrangements, means that any time series comparisons with figures produced from the old system (up to 2010/11) should be treated with caution.

Volume of records – Northumberland, Tyne and Wear Foundation Trust (RX4)

Fewer records were submitted than normal for Northumberland, Tyne and Wear Foundation Trust. This was due to a change in the data extraction process and this will be rectified for future submissions.

Episode duplication

There is evidence that a small number of trusts submitted duplicate patient records in Q2 provisional data (duplication in Q1 refresh data was negligible). This affects approximately 200 records and whilst this does not significantly impact the majority of indicators (as they provide a count of people rather than episodes) it should be noted that this will have a minor impact on indicators 12 and 13 (which involve a record count).

Default postcodes

Due to an issue with the data processing, default postcodes were not rejected on submission and the Valid Postcode Flag for these records was set to Y. To ensure that the data quality Measure for postcode was not affected be this issue (with a larger number of records being categorised as Valid than actually were), the Valid Postcode Flag was not used in the construction of the DQ measure for this release and default codes commencing ZZ were categorised as missing (as they should not have flowed). The on submission validation issue will be addressed in a future release of the system.

Default and invalid postcodes are not permitted to flow in MHMDS submissions as they can damage the index used to match and allocate the MHMDS person pseudo identifier.

CPA Episodes

The raw data suggests that multiple, overlapping CPA episodes are being submitted for some patients. It is thought that this is a feature of organisations adapting their data extraction routines for the version 4 submission. Although CPA Episodes are used in the statistics in this release, the statistics are not affected by this issue as the measure is a count of people on CPA, not a count of CPA Episodes.

Community Mental Health Indicators

This publication is accompanied by a spreadsheet containing a lists of ‘breach reasons’ (text provided by submitting organisations in response to the Omnibus collection system flagging up validation errors) for the community activity returns as well any additional reasons provided by the organisations for these breaches. These reasons include explanations and additional information and should be considered alongside the data, particularly when examining results at an organisational level. The length of the breach reasons field has been extended in order to ensure entire comments are available to view.

Since the previous publication, we have been reviewing the quality assurance methodology inherent in the existing Omnibus collection system for this data. We have found that revisions to figures can be provided by organisations retrospectively and these are accepted onto the system and used to update a reference table holding historic figures. However, we do not revise published figures and submitting organisations are aware that they only have one chance to revise their figures (i.e. the refresh submission). After each collection deadline, new figures are validated against those in the reference table and users should be aware that published breach reasons have been generated as a result of comparison against figures which may not necessarily match the published figures

We will be working with the Department of Health and the Omnibus Team to assess and redesign the current validation routines in order to improve their effectiveness. We will update published guidance to submitting organisations in line with any changes made.

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.

The window for submission was open between 24th October 2011 and 25th November 2011. Although organisations were not mandated to supply all new data items, they did have to make their submissions in the new version 4 format.

The collection period for community activity data was between 1st October 2011 and 31st December 2011.

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.

Accessibility

Alongside this data quality statement, an Executive summary of the results included in this publication is accessible via the NHS IC internet as a PDF document together with supporting Excel files containing reference tables for each dataset.

A machine readable file containing the data used to create the analysis for the results from the Community Activity Return is published alongside the main publication document. Its reuse is subject to conditions outlined here:

http://www.ic.nhs.uk/data-protection/terms-and-conditions

We intend to produce a similar file for the MHMDS in the future but will be consulting with users of these statistics as part of a wider consultation on the future of statistical outputs from the MHMDS in order to determine which aspects of this extensive dataset are of most interest.

Providers and commissioners will be able to obtain a record level data extract for their patients from the Open Exeter Bureau Service Portal.

Information for commissioners on gaining access to the system to download extracts:

http://www.ic.nhs.uk/services/mental-health/using-the-service/datasets-databases-and-data-collections/mental-health-minimum-dataset-mhmds/mhmds-submissions-via-the-bureau-service-portal

Breach reasons for validation failures generated in the collection of the community activity data via the Omnibus system are published in addition.

Clarity

The indicators are presented in two MS Excel files, each with a contents sheet and a broad definition of each indicator. Terminology is defined where appropriate.

Full details of the way that MHMDS returns are processed, which will be of use to analysts and other users of these data, are provided in the MHMDS version 4 User Guidance, available on the NHS IC website:

http://www.ic.nhs.uk/services/mhmds/spec

In order to prevent disclosure of identities or information about service users, small denominators in MHMDS indicators have been suppressed. Where suppression has been carried out, England totals for indicators have been rounded to the nearest 5.

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.

Coherence

Mental Health Indicators were derived from the MHMDS.

The community activity indicators published here were derived exclusively from the Omnibus collection, and details of guidance issued to submitting organisations can be found here:

http://www.ic.nhs.uk/webfiles/Services/Omnibus%20Guidance/Collection%20Guidance/Community%20Activity/2010-2011/Q4/Guidance_Community_Activity_Mental_Health_Collection_1011_Q4_WEB_FINAL.doc

Other community activity indicators are collected by DH using the UNIFY system.

Comparability

MHMDS Indicators

The MHMDS is only source of data for mental health and community services.

Returning MHMDS is mandatory but it was accepted that not all organisations were able to submit MHMDS Q1 data using new arrangements during the submission window. The ISN for the data set change was issued in April 2011 and for many organisations this was too late to be able to update local systems. Furthermore, some organisations were prevented by performance issues from making as many test submissions as they would normally make and in several cases organisations held back from making data refinements in order to allow other users on to the system. For this reason the first set of routine quarterly MHMDS Q1 2011/12 reports (published on December 16th, 2001[9]) are not

[9] The Health and Social Care Information Centre 'Routine Quarterly Mental Health Minimum Dataset Reports Provisional Q1 2011/12 summary statistics and related information':
http://www.ic.nhs.uk/pubs/mhmds

considered of a suitable quality or coverage for performance management purposes and should not be compared with reports in this publication.

Comparison over time of indicators derived from version 4 MHMDS with indicators derived from version 3 MHMDS should not be attempted until we have fully embedded this system and data quality issues have been fully investigated and addressed. Large changes in indicator denominators have been observed (e.g. indicators 1 and 5) and at present we can only account for some of the likely causes. The increase in overall record numbers is likely to have had a significant effect on indicator values when compared with those produced from MHMDS prior to 2011/12. Additionally, the difficulties experienced by some organisations in making complete submissions in the new format has also affected the calculated indicator values as in certain cases there are noticeable changes between Q1 and Q2 2011/12 and we cannot be confident that these changes are not entirely attributable to data quality issues.

Finally caution should be exercised in any time series comparison of indicators 5 and 13, as the Department of Health made changes to the methodology used in their construction between 2010/11 and 2011/12.

We must stress to providers again of the importance of checking their records before submission to ensure that their records are all current and valid.

Community Mental Health Activity

No data quality issues affecting comparability have been reported. It is anticipated that many areas of the Community Activity Return will be covered by future iterations of the MHMDS and we will continue to report on developments as they occur.

Trade-offs between output quality components

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

We are not including a 'data.gov' file containing underlying data because MHMDS version 4 is such a rich and varied dataset that we cannot be sure currently what would be most useful to users of these statistics. We will be inviting users' comments on this during our 2012 consultation.

Whilst a more thorough assessment of data quality has been made for this publication, we aim to continually improve statistics generated from MHMDS version 4 data. In order to achieve a quick turnaround to meet user needs and because the system is still 'embedding' we have not yet assessed data quality or completeness on an item by item basis. The system is still embedding and we are working to fully understand the differences between the version 3 and the version 4 systems so that we can make these judgements. We have an ongoing dialogue with the data providers and issues identified will be followed up and inform future submissions and publications.

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 purpose of the routine quarterly MHMDS reports is to provide Department of Health (DH), Mental Health services, commissioners and members of the public with information about NHS funded specialist mental health services for adults. This publication is driven by the need to ensure the continuing flow of data from the MHMDS even though the major changes to the dataset in version 4 required the implementation of a new system for processing the data, which is still embedding.

Community indicators being published in part to respond to stakeholder (DH) needs but also because we feel their inclusion in this release will be of wider use as some of these measures could potentially be produced from MHMDS in future. These statistics are also likely to be used by front line organisations who are involved with commissioning to support the NHS.

Over the course of the year we will be working with DH to agree what additional measures, previously produced from other data sources, should be produced from MHMDS and how. We will also be consulting with users to find out what additional analyses should be produced from the MHMDS version 4 to support users' evolving needs.

We expect to be announcing the consultation in early 2012 and if you would like to contribute, please email us with your contact details to enquiries@ic.nhs.uk, with 'MHMDS Statistics Consultation' in the subject line.

Performance, Cost and Respondent Burden

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

The MHMDS has been identified as the data source to replace others in the Zero Based Return programme designed to reduce burden on the NHS. New analyses in the scope of this will be included in this publication over the forthcoming year, starting with the community activity data. These will be parallel produced from their original source and MHMDS as this becomes possible through development of the MHMDS.

Confidentiality, transparency and security

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

- Organisations may provide a refresh of their data during the data collection window for the subsequent reporting period should they wish; this will be published as final data with the next release.
- All publications are subject to a standard NHS IC risk assessment prior to issue. Disclosure control is implemented where deemed necessary.

Please see links below to relevant NHS IC policies.

Statistical Governance Policy
http://www.ic.nhs.uk/webfiles/publications/Statistical%20Governance%20Policy.pdf

Freedom of Information Process
http://www.ic.nhs.uk/data-protection/freedom-of-information-foi

Data Access and Information Sharing Policy
Click here to go to policy

Data Protection Charter
http://www.ic.nhs.uk/data-protection/data-protection-charter

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