Learning Disability Census Further Analysis Report: Background Data Quality

England, 30 September 2015

Published 18 March 2016
We are the trusted national provider of high-quality information, data and IT systems for health and social care.

www.hscic.gov.uk
enquiries@hscic.gov.uk
@hscic

This product may be of interest to the Department of Health, the Care Quality Commission and Public Health England. It will also be of interest to commissioners and providers of inpatient and community-based services for people with learning disabilities and/or autistic spectrum disorder (including Asperger’s Syndrome). Charities and third sector organisations with a focus on people with learning disabilities, and/or autistic spectrum disorder (including Asperger’s Syndrome) as well as patients themselves, and their family and friends, may also find this product useful.

Author: Community and Mental Health team, Health and Social Care Information Centre

Responsible statistician: Tony Childs, Programme Manager

Version: V1.0

Date of publication: 18 March 2016
# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>Context</strong></td>
<td>4</td>
</tr>
<tr>
<td>Background to this publication</td>
<td>4</td>
</tr>
<tr>
<td>Purpose of this document</td>
<td>5</td>
</tr>
<tr>
<td>Presentation of figures within this document</td>
<td>5</td>
</tr>
<tr>
<td><strong>Methodology – determining Local Office of ward stay and residence</strong></td>
<td>5</td>
</tr>
<tr>
<td>Data tracing</td>
<td>5</td>
</tr>
<tr>
<td><strong>Data quality report: assessment of statistics against quality dimensions and principles</strong></td>
<td>6</td>
</tr>
<tr>
<td>Relevance</td>
<td>6</td>
</tr>
<tr>
<td>Suppression</td>
<td>6</td>
</tr>
<tr>
<td>Accuracy and reliability</td>
<td>7</td>
</tr>
<tr>
<td>Accuracy</td>
<td>7</td>
</tr>
<tr>
<td>Reliability / known data quality issues</td>
<td>7</td>
</tr>
<tr>
<td>Timeliness and punctuality</td>
<td>7</td>
</tr>
<tr>
<td>Accessibility and clarity</td>
<td>7</td>
</tr>
<tr>
<td>Accessibility</td>
<td>7</td>
</tr>
<tr>
<td>Clarity</td>
<td>8</td>
</tr>
<tr>
<td>Coherence and comparability</td>
<td>8</td>
</tr>
<tr>
<td>Coherence</td>
<td>8</td>
</tr>
<tr>
<td>Comparability</td>
<td>8</td>
</tr>
<tr>
<td>Trade-offs between output quality components</td>
<td>8</td>
</tr>
<tr>
<td>Assessment of user needs and perceptions</td>
<td>8</td>
</tr>
<tr>
<td>Performance, cost and respondent burden</td>
<td>9</td>
</tr>
<tr>
<td>Confidentiality, transparency and security</td>
<td>9</td>
</tr>
</tbody>
</table>
Introduction

This document constitutes a background methodology and data quality report for the Health and Social Care Information Centre (HSCIC)'s 2015 Learning Disability Census – Further Analysis. The statistics included in this release relate to a snapshot count recorded for the 30 September 2015 of inpatients with learning disabilities, autistic spectrum disorder and/or behaviour that challenges. The 2015 Learning Disability Census was the third collection in this series; the previous two were 30 September 2013 and 2014. This further analysis includes more granular information than the initial report with a geographical split to Local Office level.

Context

Background to this publication

In response to the Winterbourne View Hospital inquiry, the Learning Disability Census was jointly commissioned by the Department of Health, the Care Quality Commission and Public Health England. This survey was carried out by the Health and Social Care Information Centre (HSCIC)'s Data Collections Team during October 2013. The principal aim of the Census is to deliver action 17 in “Transforming Care: A national response to Winterbourne View Hospital”1. A programme of action (the Concordat) was established to improve service provision for people with learning disabilities, autistic spectrum disorder, and/or behaviour that challenges and the Census will inform this improvement programme by collecting information about the profile and circumstances of these people, including numbers relating to out of area placements and lengths of stay.

The HSCIC undertook the first Learning Disability Census in 2013 and published two reports which presented a definitive baseline accounting for 98 percent of in-scope provider returns. In accord with the timetable of actions the census was repeated one year later on 30 September 2014 to enable the Learning Disability Programme Board to be informed and assess the extent to which change and progress had been achieved. The 2015 Learning Disability Census builds on this work to assess the scope of change.

The Learning Disability Census provides a snapshot of inpatient services at an individual record level where services were delivered in NHS and independent facilities at midnight on 30 September 2015. The full list of data items collected can be found here: http://www.hscic.gov.uk/ldcensus

Purpose of this document

This paper provides additional information on the methodology used to collect, process and disseminate the 2015 Learning Disability Census for the items that have been published at Local Office level. The Background Methodology and Data Quality Report published as part of the initial report for the 2015 Learning Disability Census includes more detailed information. http://www.hscic.gov.uk/pubs/ldcensus15

This document also aims to provide users with an evidence based assessment of the quality of the statistical output from the Learning Disability Census, reporting against those of the nine European Statistical System (ESS) quality dimensions and principles appropriate to the output.

In doing so, this meets the Health and Social Care Information Centre (HSCIC)'s 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”.

Presentation of figures within this document

All counts of patients have been rounded in line with the suppression rules used throughout this release; please see the ‘Relevance’ section of the data quality report below for more detail.

Methodology – determining Local Office of ward stay and residence

Local office of ward stay and residence are determined by postcode of hospital and home address. To improve the accuracy of home address postcode, patient information was ‘traced’ (see below). Postcode of hospital could not be traced, if an incorrect postcode was supplied then Local office of ward stay could not be determined.

Data tracing

In line with the methodology used for the 2013 and 2014 collections, records were sent to the HSCIC Personal Demographics Service (PDS) for NHS number verification and to trace a last known postcode of residence where that supplied by providers was invalid or unknown. Date of Birth, Gender, name and GP practice were also traced and returned.

All records were sent for tracing irrespective of whether the patient was in scope or not. All 3,000 in scope patient records were sent for tracing. The Background Methodology and Data Quality Report published as part of the initial report for the 2015 Learning Disability Census includes more detailed information about how traced data was used. This section relates to postcode usage only.

---

2 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.

3 http://www.hscic.gov.uk/pubs/ldcensus15
Postcode of patient home address
The tracing process considerably improved data quality for postcodes of residence, reducing the proportion of all Learning Disability Census records submitted by providers that had ‘ZZ99’ postcodes. For in-scope records, tracing increased the number of valid postcodes from 2,180 records (73%) to 2,980 records (99%). It was still not possible to calculate distance from home from all 2,980 of these patients since 30 had an invalid hospital postcode and there was no opportunity to alter these.

Data quality report: 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.

The release comprises a report which includes tabular and graphical presentations of data, this background data quality statement and a set of reference data tables. It provides information on patients with learning disabilities receiving specialist inpatients care in England. Report data are presented at Local Office level or lower. A machine readable file accompanies the reference data tables. Reference data tables are predominantly presented at Local Office level, with one Table at Local Authority level.

Whilst the dataset contains sensitive data items including NHS number and person characteristics, the output contains only aggregate figures and does not contain NHS number or other person-identifiable information. It will not be possible to link the data to other sources, and tables have been aggregated and suppressed in such a way as to minimise any risk of disclosure:

Suppression
All figures presented within the report and within the reference data tables have had the following measures applied:

Counts
- Values of 0-4 have been replaced by ‘*’;
- All remaining values have been rounded to the nearest 5;

All figures have been calculated from the raw data, suppressed where needed and then rounded. This may mean that some totals presented in the reference data tables do not match the sum of the subtotals within the same table.

Percentage figures
Due to small numbers once the data is broken down by Local Office, the extra precaution of rounding the % figures to the nearest 5% was implemented. This is a further safeguard to protect patient confidentiality.

- Percentages lower than 5% have been replaced by ‘*’;
- All remaining percentages have been rounded to the nearest 5%;
- Note this only applies to percentages at Local Office level. England level percentages are rounded to the nearest whole number as per the initial 2015 report.
All percentage figures have been calculated from the raw data, supressed where needed and then rounded. This may mean that some subtotals will not add up to 100%.

**Accuracy and reliability**

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

**Accuracy**

As is standard HSCIC practice, all figures in the reference data tables were independently checked. All figures in the report and Executive Summary were also independently checked. Data were traced via the HSCIC Personal Demographics Service (PDS). This was for 3 reasons.

1. To provide postcode of home address of the patient when none was returned.
2. To collect more accurate information on age and gender.
3. To collect more accurate information for linking purposes on age, gender, and name.

Item 1 helped to improve the accuracy of the Local Office of residence by using postcodes retrieved from the traced data. More information on tracing was published in the

**Reliability / known data quality issues**

The Background Methodology and Data Quality Report published as part of the initial report for the 2015 Learning Disability Census includes this information.

**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 collection window for the Census was open between the 1st October 2015 to 14th October. The initial findings were published on the 15th December 2015. More in-depth analysis of key measures at Local Office level followed as part of this report.

**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**

The publication is accessible via the HSCIC website as a series of Excel spreadsheet tables and a detailed report in PDF format. The Excel report is divided into separate tabs matching the chapters of the PDF report for ease of comparison. A machine readable file in CSV format of the question responses and an easy read version of the report complete the release.

---

Clarity
The Excel report is divided into separate tabs, which provide tabular analysis of reference data to support the main report. A list of tables (together with summary data quality and disclosure control information) is provided on a front sheet, and the relevant section of the main report is detailed. The data tables are clearly referenced within the main report.

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
The Background Methodology and Data Quality Report published as part of the initial report for the 2015 Learning Disability Census includes this information.

Comparability
The Background Methodology and Data Quality Report published as part of the initial report for the 2015 Learning Disability Census includes this information. See footnotes above for a link to the report.

Trade-offs between output quality components

This dimension describes the extent to which different aspects of quality are balanced against each other.
The only collection tool available to the HSCIC to conduct the Census in the allotted completion time was the Clinical Audit Tool; this was used in 2013 and 2014 to good effect and was modified and improved for the 2015 collection.

Analysis from the census is again being published in two releases in order to maximise the utility of information from this collection. Full results at national level were reported in December this release includes more granular information at regional level.

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 Background Methodology and Data Quality Report published as part of the initial report for the 2015 Learning Disability Census includes this information. See footnotes above for a link to the report.

5 http://www.hscic.gov.uk/pubs/ldcensus15
Performance, cost and respondent burden

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

The Background Methodology and Data Quality Report published as part of the initial report for the 2015 Learning Disability Census includes this information.

Confidentiality, transparency and security

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

The Background Methodology and Data Quality Report published as part of the initial report for the 2015 Learning Disability Census includes this information. See footnotes above for a link to the report.

---

Published by the Health and Social Care Information Centre
Part of the Government Statistical Service

Responsible Statistician
Tony Childs

This publication may be requested in large print or other formats.

For further information
www.hscic.gov.uk
0300 303 5678
enquiries@hscic.gov.uk

Copyright © 2016 Health and Social Care Information Centre. All rights reserved.
This work remains the sole and exclusive property of the Health and Social Care Information Centre and may only be reproduced where there is explicit reference to the ownership of the Health and Social Care Information Centre.
This work may be re-used by NHS and government organisations without permission.