The quality of Mental Health care cluster costing and activity data in the NHS

Payment by Results data assurance framework

September 2014
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For the past seven years, the Payment by Results data assurance framework has provided assurance over the quality of the data that underpin payments. In 2013/14 Capita CHKS continued work supporting the currency development in mental health by undertaking costing and data quality reviews at a further 25 NHS mental health providers who volunteered to participate in this work. Since 2012/13 we have reviewed costing and activity data at 34 (60 per cent) mental health trusts.

The work supports improvement and identifies areas where mental health trusts can take action prior to the implementation of any national payment system. We have developed a checklist to help support mental health trust Board members’ and senior managers’ to improve the accuracy of care cluster costing and the activity data that underpins it.

Capita CHKS reviewed processes at trusts to support accurate costing of care clusters, from board level down to the appropriateness of cost allocations used to determine care cluster costs. Service user records were reviewed to check that they supported the activity data used by the trust that is important for costing and payment purposes. This included reviewing the accuracy of the:

- super cluster and care cluster; and
- cluster start date and end date.

Mental health care cluster costing is mainly done using a top down apportionment approach\(^1\), or in some cases using the CPPP approach. Costing care clusters in mental health services is less developed and less mature than costing currencies in acute hospital settings because acute hospitals have been implementing Payment by Results since 2003/04 and the care cluster currencies were only mandated for use in 2012. As a result compared to costing in acute hospital settings\(^2\) mental health care cluster costing is less developed, lacks granularity and needs development and leadership at a senior level in organisations.

The majority of trusts reviewed (88 per cent) had a good or adequate approach to costing the 2012/13 reference costs submission. The trusts that had good costing and effective systems all had good support from senior staff and their sign off process was robust. They were further supported with a Board that was becoming engaged and informed about the costing process. Only a small number of trusts had any form of audit or systematic reviews of their costing processes or systems despite HFMA costing guidance saying this is important. Cluster activity and cost data was not used well for benchmarking performance against other trusts. There were pockets of good practice across the country but no national consistency in benchmarking.

Trusts have a growing awareness of their own care cluster data quality issues. However, our reviews on the quality of care clustering activity data found service users whose care cluster activity data was not supported by information recorded in the patient record. In total we reviewed over 1800 care clusters. Overall 31.2 per cent of the care clusters tested had one or more of the following errors:

- the super cluster or cluster\(^3\) was not supported by evidence in the service user record;
- number of days the service user was in the cluster was not correct; or
- no evidence in the service user record to support the clustering decision – the case was unsafe to audit.

We reviewed care cluster events where the service user was new to service and care cluster events where the service user changed care cluster – called a ‘transition’. Table 1 summarises the key results from the 2013/14 audit programme.

### Table 1: Key results from 2013/14 audit programme

<table>
<thead>
<tr>
<th></th>
<th>New care cluster</th>
<th>Transition care cluster</th>
<th>Combined figure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total clusters with no errors</td>
<td>74.3%</td>
<td>62.6%</td>
<td>68.8%</td>
</tr>
<tr>
<td>Total data quality error rate</td>
<td>25.7%</td>
<td>37.4%</td>
<td>31.2%</td>
</tr>
<tr>
<td>Breakdown of errors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Super cluster wrong</td>
<td>1.5%</td>
<td>4.9%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Care cluster wrong</td>
<td>9.7%</td>
<td>16.6%</td>
<td>13.0%</td>
</tr>
<tr>
<td>Days in cluster wrong</td>
<td>7.9%</td>
<td>4.0%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Unsafe to audit</td>
<td>6.5%</td>
<td>11.9%</td>
<td>9.1%</td>
</tr>
</tbody>
</table>

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1. In the 2012/13 reference costs submission the Care Pathways and Package Project (CPPP) approach is based on a calculation of direct costs of interventions, which are used to determine the relative resource intensity of care provided across the clusters. It seeks to utilise patient user level costing methodologies. A cost per day is first calculated, and this is applied to the duration of care between reviews to give a cost per cluster period.
2. In 2013/14 Capita CHKS carried detailed audits at 50 acute NHS and Foundation Trusts.
3. See section in main briefing “Brief introduction to currencies and costing in mental health”
Summary continued

Trusts that had good accuracy rates for clustering had excellent training and support arrangements for the clinicians clustering. Trusts with poor data quality were not following the Mental Health Clustering Tool guidance issued by NHS England and Monitor.

There were 9.1 per cent of records that were unsafe to audit. The quality of the service user record was poor in these instances which meant that there was not enough evidence to review the clustering decision. We found:

- cases of no documents in the service user record to support the service user clustering decision; and
- instances where there was a record of a clinician making contact with the service user but no clinic letter following an appointment or record of the visit to a person’s home.

Incomplete and poorly annotated service user records are a service user safety issue that trusts should address.

Data quality continues to challenge mental health trusts as they move towards a new pricing and payment system. In their consultation on the 2015/16 tariff Monitor and NHS England have signalled their expectation that providers and commissioners use the adult mental health cluster currency for payment, and continue to submit reference costs data based on the clusters in 2015/16. Monitor and NHS England have also signalled they want to proceed with the development and adoption of new mental health currencies.

Our findings shows that there are issues within cluster costing and the activity data that underpins it that means the costing data submitted nationally may not be robust enough to be used consistently as the basis for a national payment and pricing system in mental health across the NHS.

The following checklist will help support mental health trust Board members’ and senior managers’ to address these issues and improve care cluster costing and data quality.

To find out more about the PbR assurance framework, or to discuss costing and data quality at your organisation, please email: pbrassurance@capita.co.uk

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1 Available at https://www.gov.uk/government/consultations/nhs-national-tariff-payment-system-201516-engagement-documents

2 Unless they develop an alternative approach in accordance with the applicable rules. None of the trusts we reviewed reported to us that they were developing an alternative approach to care clusters.
## Checklist to improve the quality of care cluster cost information and activity data underpinning it

Areas for Board members’ and senior managers to support, challenge and seek assurance on to improve the quality of care cluster costing and activity data quality.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>1. Board engagement</strong></td>
<td></td>
</tr>
</tbody>
</table>
  - Acknowledge the direction of travel towards care cluster currencies and encourage the organisation to support accurate clustering and better costing.  
  - Report the reference costs index (RCI) to the board, with suitable information about costs, changes from previous years and national performance.  
  - Update the Board (or delegated committee) on known data quality issues and the work to resolve them. |
| **2. Total costs** |  
  - Check the quality of the reconciliation of the reference costs quantum to the signed annual accounts.  
  - Ensure all exclusions are in line with reference costs guidance and have been approved by DH and the correct costs are included in care cluster costs. |
| **3. Senior sign off and review** |  
  - Finance Director, and other relevant Directors are aware of and follow the DH requirements for Board approval and Finance Director sign off.  
  - A senior manager (such as an Assistant Director of Finance) should be responsible for ongoing scrutiny of the costing process and submission. This will help costing leads address issues and ensure adequate checks are in place. |
| **4. References costs project plan** |  
  - Develop a project plan for the production of cost information with clear timescales and inputs from teams outside the costing team identified. This will help will improve accountability from the different departments involved. |
| **5. Document and audit the costing process** |  
  - Document the costing process.  
  - Put in place processes to audit and review it regularly. |
| **6. Benchmark and sense check costing data** |  
  - Benchmark costing and activity data to other organisations.  
  - Sense check data internally checking that activity data and other inputs reflect other data outputs such as Mental Health Minimum Data Set submissions. |
| **7. Improve patient records** |  
  - Make sure patient records accurately reflect patient assessments, interventions and care cluster decisions. This will help support better patient outcomes. |
| **8. Get initial assessment and care cluster data right** |  
  - Support and train mental health clinicians so they follow the MHCT guidance and Monitor and NHS England’s Guidance on mental health currencies and payment on initial assessments.  
  - Support mental health clinicians to record initial assessments, care clusters and, accurately record start/ end dates of care clusters and clusters reviews.  
  - Support mental health clinicians to follow the MHCT guidance on the care transitional protocols consistently within the trust. |
| **9. Check accuracy of activity data** |  
| **10. Link packages of care to clusters** |  
  - Ensure that packages of care link to care clusters and are used by mental health clinicians to support delivery of care to service users. |
Background and approach

For the past seven years, the Payment by Results data assurance framework has provided assurance over the quality of the data that underpin payments between commissioner and providers, promoting improvement in data quality and supporting the accuracy of payment within the NHS.

The assurance framework is the only independent and comprehensive data quality programme within the NHS and is an integral part of the payment system. The focus of this work is to improve the quality of data that underpins payments, but the data we review is also of wider importance to the NHS as it is used to plan and oversee healthcare provision. In 2013/14 the assurance framework audit programme focused on three key areas:

- auditing the arrangements and accuracy for the submission of reference cost returns at 50 acute NHS providers;
- undertaking clinical coding audits at 50 acute NHS providers; and
- supporting tariff development and implementation by undertaking payment data quality reviews at 25 NHS mental health providers.

This briefing outlines the key messages from our work supporting currency development and implementation by undertaking payment data quality reviews at 25 NHS mental health providers. Findings from our reference costs audit at acute providers and coding audits have been reported separately, although relevant messages from our June 2014 publication Improving the quality of costing in the NHS which summarised our review of costing at acute health providers have been included here.

The assurance framework is delivered by Capita CHKS. Responsibility for the data assurance framework has moved to the Department of Health from the Audit Commission.

The Department of Health, Monitor, NHS Mental Health and the NHS Trust Development Authority provided overall managerial direction for the agreed work programme in 2013/14.

Approach

The approach built on the work completed under the PbR data assurance framework in 2012/13, when Capita CHKS undertook a review of mental health currencies at nine mental health trusts. Capita CHKS summarised the findings of this work in Payment by Results Data Assurance Framework: Report on Assuring Mental Health Currencies. Mental health currencies are called care clusters and full details on mental health currencies and payments have been published by Monitor and NHS England.

Between November 2013 and May 2014 we reviewed costing and data quality at 25 mental health trusts. We reviewed 9 trusts in 2012/13. We have now reviewed costing and activity data at over 60 per cent (34 of the 56) of mental health NHS trusts and foundation trusts.

Our methodology covered two key areas that are important in the development of mental health currencies: costing cluster currencies; and the accuracy of activity data that underpins the currency.

We reviewed the processes in place at each organisation to support accurate costing of care clusters for the 2012/13 reference cost submission, from board level down to the appropriateness of cost allocations used to determine cluster costs. We looked at:

- producing cost information, checks and known data quality issues;
- clinician engagement in costing; and
- board assurance and senior sign-off.

Our auditors used the areas reviewed to make an overall judgement about the quality of costing in the organisation based on the application of the reference costs guidance for 2012/13.

We reviewed the accuracy of data that underpins the care clustering decision and key data items that can impact on cost and price of cluster. We asked trusts to give us care cluster data from service users who were in service from 1 April 2013 for a six month period that was the same data which they had submitted to the Health and Social Care Information Centre’s (HSCIC) Mental Health Minimum Data Set (MHMDS).

This data consisted of two types of service users; those who were new to service and were being clustered following an initial assessment and those who were already in a care cluster and were moving to a different care cluster. This year was the first time we reviewed the accuracy of service users who moved from one cluster to another: a transition. This part of the review tested how well trusts were using the care transition protocols in the Mental Health Clustering Tool (MHCT).

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4 This is also referred to as “stepping up” or “stepping down” in the MHCTv3.1.
Background and approach continued

We reviewed each service user record to check that it supported the activity data supplied by the trust that is important for costing and payment purposes. Scoring service users using the MHCT is a clinical decision. We worked with a representative with clinical experience of clustering at providers to review each individual service user record against MHMDS data. We considered the accuracy of the:

- super cluster and cluster;
- cluster start date and end date.

If we were unable to find any evidence to support the cluster data sent to the MHMDS we declared the record unsafe to audit (UTA).

**Brief introduction to currencies and costing in mental health**

The currencies, known as ‘care clusters’, cover most mental health services for working age adults and older people. The care clusters were mandated for use from April 2012 by the Department of Health. There are 21 care clusters in use, organised under three super classes: non-psychotic, psychotic and organic, plus a variance cluster, zero. There is no cluster 9 at present.

Service users are allocated to the clusters using the MHCT. This tool is based on HoNOS and is a tool that most mental health clinicians in England will be familiar with. It provides a way of capturing the presenting needs of service users coming into mental health services. The tool helps to group people with similar level of needs to the same cluster, although their specific diagnosis may be different. The MHCT booklet suggests likely and unlikely diagnoses for each of the clusters. The clustering tool has 18 scales (e.g. depressed mood, problems with activities of daily living), the first 12 of which are HoNOS. Each scale is given a rating from 0 (no problem) to 4 (severe to very severe problem).

Mental health providers should cost their services to the same costing principles set out in Approved Costing Guidance that apply to all NHS providers, and to the costing standards set out in the HFMA Clinical Costing Standards for Mental Health. To be able to cost accurately at care cluster level trusts need to record activity and interventions by service user and have the care cluster assigned appropriately so costs can be built up by service user and then by cluster.

**Participating organisations**

Capita CHKS would like to thank the 25 trusts who participated in the reviews. All trusts who participated volunteered to do so. In 2012/13 we reviewed nine trusts. It was agreed with the Department of Health that these trusts would not be revisited in 2013/14. Because trusts volunteered we agreed that the results would remain confidential and individual results would not be published. Each trust has received a local report with its review findings. A list of the Trusts who volunteered in 2013/14 is in appendix 1.

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11 Some Trusts chose to have a clinical representative signoff issues we found rather than reviewing each case with the auditor.
12 This is a brief extract from Monitor and NHS England’s Guidance on Mental Health Currencies and Payment 2014/15. For more in-depth information please refer to the guidance available at https://www.gov.uk/government/publications/mental-health-currencies-and-payment-guidance
13 Currencies are the unit of health care for which a payment is made, and can take a number of forms covering different time periods from an outpatient attendance or a stay in hospital, to a year of care for a long term condition. Tariffs are the set prices paid for each currency.
14 Mental Health Care Clusters are defined in the NHS data dictionary available at http://www.datadictionary.nhs.uk/data_dictionary/nhs_business_definitions/m/mental_health_care_cluster_de.asp?shownav=1
15 Health of the Nation Outcome Scales (HoNOS) was developed by the Royal College of Psychiatrists and funded by the DH. The tool is in use in many parts of the world.
Findings

Accuracy of care cluster costs

In mental health trusts costing is mainly done on a top down apportionment approach, or in some cases trusts were calculating costs using the CPPP approach[^16]. Based on the data available to the costing teams, the majority of trusts were able to provide a unit cost per day per cluster at trust level, that was reasonable for the 2012/13 reference costs submission. Costing care clusters in mental health services is less developed and less mature than costing currencies in acute hospital because acute hospitals have been implementing Payment by Results since 2003/04. As a result compared to costing in the acute sector mental health care cluster costing is less developed, lacks granularity and needs development and leadership at a senior level in each organisation.

Mental health trusts deliver services to service users in care clusters in community and inpatient settings. Mental health community services vary between trusts depending on a range of organisational factors, however most utilise some form of team or area based approach. Costs for delivering the same care cluster in different service user settings and community teams will vary within trusts. Whilst trusts have to submit inpatient and community costs separately, we found that trusts were rarely able to differentiate these costs internally and only able to generate a trust average community and in-patient care cluster costs in line with the reference costs guidance.

This means that whilst mental health trusts fulfil the reference costs submission criteria they are not all able to undertake the detailed analysis needed to engage in effective internal benchmarking, sense checking, clinical engagement and identification of the data quality issues that are needed to improve the quality of costing information.

When we carried out our audit of acute hospital reference costs we made a judgement on the accuracy of the reference costs submission as well as the quality of costing information. In our review of mental health trusts we have not made an explicit judgement about the accuracy of the submission. However, given the issues we found with cluster data quality errors, the costing data submitted nationally may not be robust enough. For example, even the trusts who had a good quality of costing had errors in care cluster assignment and the length of time service users were in clusters that would impact on their care cluster costs.

Each audit resulted in a judgement about the quality of the approach to care cluster costing at the trust to determine reference costs, separate from the activity data quality. Figure 1 shows the percentage of trusts that had good, adequate or poor care cluster costing for the 2012/13 reference cost submission. 88 per cent of trusts had either good or adequate costing of care clusters showing that they followed the costing guidance appropriately. There were only 12 per cent whose overall approach to costing was poor. However, many trusts that had an adequate overall approach to costing had areas of costing that were poor and should be improved.

![Figure 1: Quality of costing of care clusters for the 2012/13 reference cost submission](image)

[^16]: In the 2012/13 reference costs submission the CPPP approach is based on a calculation of direct costs of interventions, which are used to determine the relative resource intensity of care provided across the clusters. It seeks to utilise patient user level costing methodologies. A cost per day is first calculated, and this is applied to the duration of care between reviews to give a cost per cluster period.
Findings continued

1. Producing cost information, checks and known data quality issues

All the trusts reviewed were able to produce a cluster cost for each of the care clusters for the organisation. For the majority of trusts there was compliance with the cluster costing guidance and an understanding of the requirements. However, there was considerable variation in how trusts calculated care cluster reference costs.

As with acute hospital trusts, mental health trusts who had good costing information and effective systems to support these all had good support from senior staff in checking cost calculations, robust sign off processes in place and a project plan for completing the submission. These trusts had a consistent approach for costing care clusters across the organisation and whilst not always documented, there was evidence in the costing team’s working paper’s how they were costing care clusters.

We found weaknesses in mental health trusts approach to:

- auditing costing processes or systems; and
- benchmarking cost data;

The National Benchmarker\(^ {17} \) has cost information in for cluster reference costs for all mental health trusts. Trusts should use information like this to help identify cost variance in care clusters.

Whilst it is not mandatory, the HFMA clinical costing standards\(^ {18} \) promote the use of cost pools as way of aggregating costs to help support benchmarking. Over half (66 per cent) trusts were starting to use cost pools in line with HFMA guidance.

Trusts were more aware of known data quality issues than in 2012/13. They were taking action to raise these internally including monitoring that:

- all service users were clustered; and
- service users did not exceed care cluster review periods without reviews.

However, no trusts were undertaking reviews of the care clustering data looking at key data items similar to those we tested.

When we were reviewing the costing of care clusters for the reference costs submission we also checked that the reference cost submission included the correct items in the reference costs quantum. There were a small number of trusts who had not followed the instructions or made errors in the submission. As a result 6 (24 per cent) trusts had made an error in the reference costs submission of more than 1 per cent of the total trust quantum. These were inaccurate because of errors in what costs should and should not be included in the reference costs quantum, such as:

- variations between the reference costs submission and the audited accounts – a trust had a difference of £1m between the value of other operating income in the quantum and the balance recorded in the accounts; or
- audited accounts indicating there should be adjustments or exclusion that have been omitted, such as non-contract income, provider to provider activities, financial liabilities or public dividend capital (PDC) dividends.

2. Clinician engagement in costing

Engaging clinicians is important in achieving an accurate understanding of cost and how care is delivered. Clinician engagement in cluster costing was not well developed in trusts. The majority of costing was carried out by the finance teams with little or no information shared. Despite this we found some good examples of clinical engagement. One trust had good validation of the underlying data through a comprehensive yearly process of sense checking, verification and face to face meetings with clinicians and managers at team level. This was done primarily for the purpose of assuring the information for reference costs rather than for routine reporting.

One of the main barriers to clinical engagement in costing was the lack of granular cluster costing data. The majority of trusts do not use patient level information and costing systems (PLICs) to calculate costs, instead they use the top down apportionment approach. This meant that data was aggregated at Trust level so only one cluster cost per Trust could be determined. Without being able to calculate cluster costs at team or service level it is challenging to present meaningful cost information to clinicians delivering services. Trusts cannot then expect to engage clinicians in validating and challenging cost data and the assumptions underpinning it.

If trusts are not able to pursue a PLICs approach, improvements in the way that cluster costs are calculated at service or team level will help promote clinician engagement and more accurate cluster costs. Being able to determine different cluster costs within an organisation such as a mental health trust will enable service leaders, those responsible for management accounts, and the costing team to better understand variations within the organisation and enhance internal benchmarking.

3. Board assurance and senior sign-off

Our experience shows that board members who are engaged and informed help drive organisations to cost better. There were 68 per cent of trusts who had Boards who were engaged in the reference costs process. However, we found only 20 per cent of trusts had good senior signoff of the reference costs submission compared to 36 per cent of acute trusts.

National costing guidance requires each trust’s Board to confirm it is satisfied with the trust’s costing process and system before the submission is made. Following our work with acute hospitals the Department of Health has strengthened the section on board assurance and senior sign-off in the reference costs guidance for 2013–14 (page 26–27). This guidance is applicable to mental health trusts.

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\(^ {17} \) www.nationalbenchmarker.co.uk

\(^ {18} \) Available at http://www.hfma.org.uk/costing/
Accuracy of care cluster activity data

The mental health care clusters have been mandated for use since April 2012. Working with clinicians at each trust we reviewed the patient record to see if the evidence in the patient record supported the clinical decision to allocate a service to a care cluster and day the service user stated and ended the care cluster were correct.

This approach checks that:

- the decision to cluster was correct;
- the evidence in the patient record supports the care cluster decision by the clinician; and
- the number of days the service user was in the cluster is correct.

This gives assurance to commissioners, providers and national organisations responsible for tariff development and setting that reported care clusters are an accurate reflection of actual need. Validating this information gives mental health trusts assurance that the data they use to calculate care cluster costs is accurate.

In total we reviewed 1,852 care cluster events. The data sample was from service users in service from April 2013. Approximately one third of the data was from each of the three super clusters:

- non-psychotic;
- psychosis; and
- organic.

We reviewed 978 care cluster events where the service user was new to service. We found one or more errors that would affect the accuracy of the care cluster in 322 (25.7 per cent) of the new care clusters audited. This means that 25.7 per cent of the new clusters had one or more errors compared to 40 per cent in the nine trusts audited in 2012/13.

In 2013/14 we reviewed the accuracy of service users moving to a new care cluster who were already admitted to service for the first time: this covered 874 cluster events where the service user changed care cluster – called a 'transition'. We found one or more errors that would affect the accuracy of the care cluster in 352 (37.4 per cent) of the care clusters audited.

When the results from the new to service care cluster and the transition errors are combined, overall 31.2 per cent of the care clusters tested had one or more of the following errors:

- the super cluster or care cluster was not supported by evidence in the service user record;
- number of days service user was in the care cluster was not correct; or
- no evidence in the service user record to support the clustering decision – the case was unsafe to audit.

These findings are summarised in Table 2.

Table 2: Summary of results from 2012/13 and 2013/14

<table>
<thead>
<tr>
<th></th>
<th>New care cluster errors</th>
<th>Transition care cluster errors</th>
<th>Combined figure</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012/13 (9 trusts)</td>
<td>40.0%</td>
<td>N/A</td>
<td>40.0%</td>
</tr>
<tr>
<td>2013/14 (25 trusts)</td>
<td>25.7%</td>
<td>37.4%</td>
<td>31.2%</td>
</tr>
</tbody>
</table>

Breakdown of 2013/14 errors

<table>
<thead>
<tr>
<th></th>
<th>New care cluster errors</th>
<th>Transition care cluster errors</th>
<th>Combined figure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Super cluster or care cluster wrong</td>
<td>11.2%</td>
<td>21.5%</td>
<td>16.1%</td>
</tr>
<tr>
<td>Days in cluster wrong</td>
<td>7.9%</td>
<td>4.0%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Unsafe to audit</td>
<td>6.5%</td>
<td>11.9%</td>
<td>9.1%</td>
</tr>
</tbody>
</table>
Findings continued

Figure 2 shows the percentage of errors split by new care clusters and transitions across all trusts reviewed. This shows that whilst all trusts had errors amongst service users who were new to service, 84 per cent of trusts had a greater error rate amongst service users who were transitioning.

Each of the three types of error will be reviewed in detail.

1a. Accuracy of new super cluster and care cluster

In total 16.1 per cent of service users were in a super cluster or cluster that was not supported by evidence in the service user record. Table 3 shows the breakdown of errors where the super cluster or cluster was wrong.

Table 3: Super cluster or cluster errors

<table>
<thead>
<tr>
<th>Error type</th>
<th>New cluster</th>
<th>Transition cluster errors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Super cluster wrong</td>
<td>40%</td>
<td>N/A</td>
</tr>
<tr>
<td>Care cluster wrong</td>
<td>25.7%</td>
<td>37.4%</td>
</tr>
</tbody>
</table>

The accuracy of clustering service users who were new to service was better for all trusts compared to cluster transitions. In the sample of service users new to service the four best performing trusts had no errors and the best performing 25 per cent had an error rate of 4.1 per cent or less.

When this is compared to the error rate in the transition sample only one trust had no errors. Half the Trusts had an error rate between 19.9 per cent and 46.3 per cent. Table 4 shows the variation in performance for care cluster accuracy across the sample reviewed. The best performing trusts were able to allocate new service users to super clusters and clusters accurately.

Table 4: Variation in super cluster and cluster errors between trusts

<table>
<thead>
<tr>
<th>Interquartile range</th>
<th>Best performing trust</th>
<th>Lower quartile</th>
<th>Mean</th>
<th>Upper quartile maximum</th>
<th>Worst performing trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>New cluster errors</td>
<td>0.0%</td>
<td>4.1%</td>
<td>10.4%</td>
<td>14.7%</td>
<td>38.5%</td>
</tr>
<tr>
<td>Transition cluster errors</td>
<td>0.0%</td>
<td>12.8%</td>
<td>19.9%</td>
<td>30.5%</td>
<td>46.3%</td>
</tr>
</tbody>
</table>
### Findings continued

Ensuring that the service user’s care cluster is an accurate reflection of their needs is an important clinical decision that must be supported by evidence in the service user record. The two main causes of errors in the 2013/14 review were the same as those found in trusts reviewed in 2012/13.

- The patient record was not an accurate reflection of the patient’s mental state and presentation. It often lacked record of good mental state examination, or was poorly written and not comprehensive. In these cases, the clinician may have made the correct cluster decision based on their knowledge of the service user or mental state examination, but the record keeping was poor and did not justify the MHCT scoring and clustering decision.
- Clinicians were not following the MHCT guidance effectively causing them to cluster patients incorrectly.

We found cases where clinicians had not followed the MHCT and made errors in super cluster assignment. Service users who had an organic primary presenting problem, such as dementia who should have been put in an organic cluster because of the interventions they were receiving were incorrectly placed in a non-psychotic cluster because they were also presenting with depressed (or low) mood.

Often clinicians allocated service users to care clusters that were incorrect because the clinician did not review mental state assessments that had been carried out on the service user in the two weeks leading up to clustering in line with the MHCT guidance. Instead they clustered only on the current presentation they assessed. Two examples of this were:
- A service user was put in cluster 12 – ongoing or recurrent psychosis (high disability) when the service user was being seen by the substance misuse service and their presentation and needs were better suited to cluster 16 – psychosis & addictive disorder (high substance misuse and engagement.)
- A service user was placed in cluster 4 – non-psychotic (severe) but given the very recent suicide attempt and presenting risk factors which led to the service user being admitted, cluster 5 – non-psychotic disorders (very severe) was more appropriate to the service user’s needs.

Care cluster errors were not evenly spread across all clusters. This shows that clinicians are more prone to getting some care clusters wrong than others. Figure 3 shows the difference in error rates across the care clusters.

**Figure 3: Variation in accuracy between new care clusters**

Conversely 63 per cent of the service users, who, according to the patient record should not be in either care cluster 11, 12 and 13, moved to a more resource intensive cluster. Overall clinicians were under-clustering service users in super cluster B – psychosis.

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19 Service users in care clusters 1, 2 and 3 are small in volume in secondary care. We audited less than 20 service users nationally so these were excluded from this figure.
1b. Accuracy of transition care cluster

Training on transition protocols was limited and many trusts had been focused on getting clustering correct on admission or focused on clustering existing service users for the first time. When we reviewed the accuracy of service users moving to a new cluster who were already admitted to service we found 21.5 per cent of service users were incorrectly stepped down or up. In these cases, clinicians did not follow the transition protocols in the MHCT when stepping service users up or down. The most common error was caused by mental health clinicians re-clustering a service user into a less resource intensive cluster because the service user’s presentation had improved in the last few weeks or months. The case studies give examples of this.

Transition protocol case study: psychosis super cluster

A service user had been in cluster 12: ongoing or recurrent psychosis, for the past 3 months receiving treatment and support. The service user was assigned a new clinician who visits the service user. Following the visit a mental state examination is completed in the notes indicating the service user’s presentation has improved and the MHCT scores are significantly lower than previously recorded. The clinician enters the HoNOS scores in the service user record and re-clusters the service user to cluster 11: ongoing recurrent psychosis (low symptoms) based on their current presentation.

This is not correct because the transition protocols state that the step down criteria is: service user fits the description and scoring profile of any likely/possible step down cluster for the past 12 months.

Transition protocol case study: non-psychotic

A service user had been in cluster 5: non-psychotic disorders (very severe) for 5 weeks following admission to a community team for severe depression. Treatment with medication and regular contact with a case worker had improved the service user's presentation significantly. The service user was stepped down to cluster 4 non-psychotic severe.

This is not correct because re-clustering a service user to a less intensive cluster after a short period of time because their presentation has improved is not in line with the transition protocol guidance.

The step down criteria is “service user fits description and scoring profile of any likely/possible ‘step down’ cluster”. Cluster 4 is a ‘rare transition’ and, based on the history of the service user and the interventions they were receiving the service user should continue to remain in cluster 5.
Findings continued

2. Accuracy of days in cluster

As greater use is placed on the data that underpins clustering for contracting, costing and currency development the accuracy of the number of days a service user spends in a cluster becomes increasingly important.

There were errors at most trusts that led to inaccurate data recording on date of entry to cluster, date of change of cluster or discharge from service. We found 7.9 per cent of new care clusters and 4 per cent of transitions had the wrong start or end date; this is considerably less than the 27 per cent error rate we found in 2012/13.

There were eight trusts that had no errors in this area. These trusts had good processes in place for managers to check that staff were clustering service users in a timely manner. This included good performance management tools that showed when service users had started care clusters and the length of time in care clusters. Trusts that had errors in this area had poor data because:

- service users were in the right cluster but it was not clear what day the cluster began; and
- service users’ discharge date and the cluster period end date differed in their notes and in MHMDS.

We found a small number of cases where service users were being clustered on discharge from inpatient units and the time they started in the inpatient unit was not accurately recorded.

Some trusts were still not able to or would not record the time spent in initial assessment compared to time in a care cluster. Costing teams had to apply local business rules to data to estimate initial assessment costs such as counting the first two contact and first two inpatient bed days as initial assessments. Whilst this provides adequate estimate of the costs of assessments it does not provide the granularity needed to differentiate the variable costs of assessments between different care clusters.

3. No evidence in the service user record to support the clustering decision – the case was unsafe to audit (UTA)

A cluster event was UTA if the record was too poor to use as a source of evidence or there was no clinical evidence to support clustering. UTA’s consisted of a range of issues. We found records with no notes of the contact with the service user despite evidence in the trust system to show that an appointment happened with the service user. The best performing 25 per cent of trusts had 3.6 per cent or less UTAs. *Table 5* shows the variation between trusts with the best performing trusts having no UTAs and the worst having 36.2 per cent of the sample.

In the trusts with UTA cases we found issues such as:

- no documents in the service user notes to support clustering. The clustering scores are an output from the contact with the service user. These scores should not replace the service user record, therefore it is important that the service user record evidences the service user’s presentation and contact with the service user;
- missing clinic letters that were not loaded onto electronic service user records so we could not verify what happened in the appointment, although notes clearly indicated information was in a letter; and
- in some cases we found that there was some record of an appointment but the mental state assessment was poor or lacked sufficient detail to support the clustering decision.

Incomplete service user records are service user safety issue and all trusts should take action to ensure that service user records are up to date, an accurate reflection of the contact made with service users and contain clear details of mental state examinations and interventions.

Packages of care

80 per cent of trusts had developed cluster packages of care, however in 2013/14 very few trusts reviewed used packages of care to shape the type of interventions a service user received. If a clinician places a service users in a care cluster it should drive the service user care package or interventions. When trusts deliver packages of care based on care clusters for service users it will improve the link between the care a service user receives, the service user’s mental health needs based on their care cluster and the outcomes that can be expected for that service user.

Table 5: Variation in percentage of UTAs between trusts

<table>
<thead>
<tr>
<th>Interquartile range</th>
<th>Best performing trust</th>
<th>Lower quartile</th>
<th>Mean</th>
<th>Upper quartile maximum</th>
<th>Worst performing trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>UTA</td>
<td>0.0%</td>
<td>3.2%</td>
<td>9.1%</td>
<td>13.8%</td>
<td>36.2%</td>
</tr>
</tbody>
</table>

20 There were four trusts with no UTAs.
Implications for currency development

In their consultation on the 2015/16 tariff Monitor and NHS England have signalled their expectation that providers and commissioners use the adult mental health cluster currency for payment\(^2\), and continue to submit reference costs data based on the clusters in 2015/16. Monitor and NHS England have also signalled they want to proceed with the development and adoption of new mental health currencies.

Data quality continues to challenge mental health trusts as they move towards new pricing and payment systems. Our findings show that there are issues within cluster costing and the activity data that underpins it that means the costing data submitted nationally may not be robust enough to be used consistently as the basis for a national payment and pricing system in mental health across the NHS. An effective pricing and payment system will depend on the care clusters accurately reflecting service users’ needs. Care clusters must link service users to packages of care so that care cluster allocation meaningfully reflects their needs and the interventions they receive. These then need to be costed accurately so that local or tariffs can be determined reliably.

Accurate data is not just important for the purposes of setting accurate tariffs, or for ensuring payment appropriately reflects the care delivered, but also for making sure that improvements in quality and outcomes can be measured. All organisations submitting data to MHMDS should have steps in place to ensure it is accurate. Mental health trusts should use the HFMA mental health costing standards\(^3\) to shape how they cost care clusters and other secondary care activity. Trusts need to improve the granularity of care cluster costs. As trusts improve costing information they should work towards determining different cluster costs within the organisation based on teams or points of delivery across the trust.

We have developed a checklist to help support Boards and senior managers address these issues and improve care cluster costing and data quality.

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\(^3\) Unless they develop an alternative approach in accordance with the applicable rules. None of the trusts we reviewed reported to us that they were developing an alternative approach to care clusters.

\(^4\) Available at http://www.hfma.org.uk/costing/
Appendix participating trusts

The following trust volunteered to participate in the 2013/14 reviews:

- 5 Boroughs Partnership NHS Foundation Trust
- Birmingham and Solihull Mental Health NHS Foundation Trust
- Bradford District Care Trust
- Cambridgeshire and Peterborough NHS Foundation Trust
- Camden and Islington NHS Foundation Trust
- Cheshire and Wirral Partnership NHS Foundation Trust
- Cornwall Partnership NHS Foundation Trust
- Coventry and Warwickshire Partnership NHS Trust
- Derbyshire Healthcare NHS Foundation Trust
- Devon Partnership NHS Trust
- East London NHS Foundation Trust
- 2gether NHS Foundation Trust
- Greater Manchester West Mental Health NHS Foundation Trust
- Lancashire Care NHS Foundation Trust
- Manchester Mental Health and Social Care Trust
- North East London NHS Foundation Trust
- Northamptonshire Healthcare NHS Foundation Trust
- Pennine Care NHS Foundation Trust
- Rotherham Doncaster and South Humber NHS Foundation Trust
- Somerset Partnership NHS Foundation Trust
- South Staffordshire and SHropshire Healthcare NHS Foundation Trust
- South West Yorkshire Partnership
- Southern Health NHS Foundation Trust
- Tees, Esk and Wear Valleys NHS Foundation Trust
- West London Mental Health NHS Trust