Payment by Results Quality and Outcomes Indicators

Report for Product Review Group Quality & Outcomes Sub Group.
October 2011
This report has been produced by the Quality and Outcomes Sub Group of the Product Review Group (Q&O PRG Sub group) for the Mental Health Payment by Results (MH PbR) project. It describes the progress made to date in responding to the request from the National Project Board for MH PbR to develop an approach that ensures quality indicators and outcome measures are an integral part of the PbR process, and in particular that they encourage the correct incentives.
Executive Summary

This report has been produced by the Quality and Outcomes Sub Group of the Product Review Group (Q&O PRG Sub group) for the Mental Health Payment by Results (MH PbR) project. It describes the progress made to date in responding to the request from the National Project Board for MH PbR to develop an approach that ensures quality indicators and outcome measures are an integral part of the PbR process, and in particular that they encourage the correct incentives.

The Quality and Outcomes PRG Sub Group was established in 2010 and has an inclusive membership (appendix 7) who have worked collaboratively to respond to the above challenge. The resultant project has four main components:

1. Test and recommend the use of quality indicators linked to the 21 clusters that form the basis of the currency model, using metrics that are currently collected consistently on a national basis as part of the Mental Health Minimum Data Set (MHMDS)

2. Establish a web-based tool that will provide guidance on the content of care packages for each of the 21 clusters, linking NICE guidance and quality standards, evidence and best practice.

3. By autumn 2011 produce a plan for how other data including the individual items within the Mental Health Clustering Tool (MHCT), could be used to augment the approach identified in 1 above.

4. By autumn 2011 produce a proposal that demonstrates how gaps in the overall framework for outcomes for each of the 21 clusters that may be filled. Approaches may include the mandating of new tools and data items and will ensure a focus on Patient Related Outcome Measures (PROM’s).

This report provides an update on all of the above areas of work and also includes a range of recommendations to the PRG to support the ongoing progress and achievement of the key objectives for this area of PbR development over the coming years.

The main recommendations can be summarised as follows:

- That there should be further evaluation and refinement of the (8) indicators identified as promising quality measures so that:
  a. The construct of the indicators is optimized for demonstrating quality
  b. The indicators are monitored over a wider range of providers and over a longer period of time.
- That issues of data quality and / or divergence of practice between providers on such issues as placing users on CPA and allocation to clusters are investigated
- That the best way of using components to the clustering tool to demonstrate improvements in patient outcomes/ recovery is further investigated
- That PRG endorse and resource further project work that can build on the approach described above, adding additional metrics and expanding the number and range of indicators and outcome measures on a cluster basis, undertaking robust field testing and making recommendations for their use on a national basis.
• That PRG resource further analysis to be undertaken as ‘business as usual’ by NHS IC from 2011/12 data onwards, when cluster data is mandated and a national picture available.
• That PRG support and establish an ongoing project structure that can deliver a comprehensive outcomes approach for PbR through to the implementation phase.
• That PRG endorse the overarching framework, combining the work with the national outcomes strategies and the ongoing production of NICE guidance and standards.

The work undertaken so far, whilst still in its early stages, is very promising and demonstrates the potential this approach offers to supporting and driving improvements in quality and by demonstrating delivery of outcomes.

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Joint Sub Group Chairs
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1.0 Introduction

The purpose of this document is to report on work to date and make recommendations to the National Product Review Group on the use of Quality Indicators and Outcome Measures as an integral part of the introduction of PbR currencies and local tariffs for mental health services.

The Coalition Government have made it clear that judging care by outcomes is one of its top priorities for the NHS. The White Paper “Equity and Excellence: Liberating the NHS” sets this out and is supported by the Outcomes Framework, published in November 2010 and the mental health strategy No Health without Mental Health, published February 2011.

Nationally, attempts are being made to address the challenges presented of moving to a system based on payment for outcomes. For example, DH has commissioned an external review to understand what work is in progress in this area, and how to build on this and previous work relating to outcomes in mental health. The review will recommend how DH should tackle the academic, clinical and practical challenge of moving towards an outcomes based system of mental health care in England, and what information is needed to support it.

2.0 Background

The current objective for establishing PbR for mental health services is to have currencies and local prices established and in use during 2012-13. Local prices will be agreed by commissioners and providers. These will need to take into account costs of existing provision, any additional costs associated with service improvements and any possible efficiencies in practice.

The development and use of quality indicators and outcomes measures specifically linked to the mental health currencies is a major dimension of the PbR work. It is all the more important given the level of variation we know exists in the care service users receive, both within organisations and across organisations, and in the context of the mental health strategy, No health without Mental Health, with its focus on recovery.

The development of the mental health currency groups is underpinned by the Mental Health Clustering Tool, a tool designed by clinicians for clinicians, to help assess the potential care needs of a service user. It supports professional judgement in the determining of a care cluster, and is based on the outcomes focused HoNOS system.

It is very important for providers and commissioners to understand and agree the care packages which will be delivered to service users in each currency cluster and also the quality indicators and outcome measures that follow these interventions.

Against this backdrop of the outcomes policy environment a decision was taken to coordinate Quality & Outcomes work at a national level, taking account of regional and specialist input and building momentum towards delivering recommendations by the end of
2011/12. The Quality and Outcomes subgroup was formed with the primary objective to identify indicators / measures specifically linked to PbR currency groups, and to recommend how these could be utilised as an integral part of the currencies.

The sub group initially identified 4 broad streams of work:

1. Identifying indicators that could be used as a part of the currency model in 2011/12, using data that was routinely collected consistently according to national definitions – work stream 1.
2. Making available guidance on the content of care packages for each of the 21 clusters, incorporating NICE guidance – work stream 2.
3. Recommending a second phase of work that could make better use of existing data, the newly collected MHCT and cluster allocation data, for expanding their use in 2012/13 – work stream 3.
4. A wider piece of work to identify remaining gaps from the above process and recommend outcome measures that could be utilised in the future, from 2013/14 onwards – work stream 4.

This work undertaken by the group is developmental in nature. The ultimate aspiration of the Quality & Outcomes subgroup is to focus on outcomes that demonstrate a person has progressed from a position beyond their mental illness by being empowered to gain control over their lives, utilising a recovery focussed personalised approach. There is a vision that for each Cluster a minimum of 1 Quality indicator, 1 Outcome measure, 1 PROM and 1 PREM will be identified by 2013/14.

3.0 Work Stream 1
Identifying indicators that could be used as a part of the currency model in 2011/12, using data that is already routinely collected consistently according to national definitions.

A pragmatic approach to this work was adopted by looking at indicators/ measures used in PbR pilot sites. It was acknowledged that this work was limited in scope and that further work would be required to identify new, more appropriate indicators/measures. Therefore, the dual aims of this work were to identify what measures should be recommended for 2012/13 and to identify what further work was required to identify further measures.

3.1 Method
In taking forward work stream 1 a key task was to establish and agree the criteria for supporting the selection and recommendation of appropriate quality indicators and outcome measures.

The starting point was to collate the work that had been started by Care Pathways and Packages Project and the West Midlands. An Outcomes Framework of existing indicators and measures, that were already collected nationally, was developed.
The following criteria for selecting and recommending the indicators and measures were agreed:

1. The indicator demonstrably reflects quality or outcomes that are relevant to the service user, practitioner, provider or commissioner.
2. Data is available at all levels and can be fed back to practitioner/teams
3. Evidence / proof that the data required to demonstrate the indicators can be collected & evaluated
4. They must support the high-level indicators which are likely to include employment, mortality, suicide and recovery
5. That they have nationally agreed definitions
6. They should fit with Commissioning for Quality and Innovation scheme (CQUIN). See Glossary for more detailed description.
7. They are specific to currency group(s)
8. A link can be made between needs (both physical & mental health), interventions and outcomes
9. That other similar processes that may be trying to do achieve the same end should be evaluated, for example work on clinical indicators.

Measures were assessed against this criteria and scored; the results of this process can be found in Appendix 1.

Outcome measure tools were assessed separately and are summarised below.

<table>
<thead>
<tr>
<th>Tool</th>
<th>Are recognised validated measures/tools with rationale for use</th>
<th>Available for use in appropriate format and free for national use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recovery Star</td>
<td>In-progress</td>
<td>Yes</td>
</tr>
<tr>
<td>CUES</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>PHQ9</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>GAD 7</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>HoNOS</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

The above tools are both validated and available for use. However with the exception of HoNOS, these are not routinely used, collected or reported as part of MHMDS in the majority of pilot sites who are using MHCT and allocating to clusters. PHQ9 is included in the latest version of MHMDS but its use in secondary care is still limited. The development and use of these or other outcome measures will be included in phase 4 of this work.

Members of the Q & O were also mindful of the Information Standard Board process (ISB) that requires appropriate evidence and validation to add any new items to the Mental Health Minimum Data Set and the time scales associated with this. More details of this process are available in the glossary.

The results were verified at the Quality and Outcomes subgroup, further discussion allowed practical input from field experts. The group identified gaps which were subsequently added to the framework:
- Service user experience. The mental health performance framework uses a small number of measures taken from the CQC patient survey. There is the potential to include these questions as they fit well across all clusters.
- Access to services and waiting times
- Safe high quality coordinated care
- Good information for people receiving services
- Choice of provider, and building closer relationships

The following measures were also discussed:

1. Delayed discharge - It was decided that whilst this may have its use elsewhere in the system it would not add value as a quality measure for PbR clusters. Therefore this will not be taken forward.

2. London physical health CQUIN measures - It was decided to look at these alongside the existing physical health measures during the analytical phase and to include in phase 3.

3. Equity of access to services (ethnicity) – It was agreed this would be useful and therefore assessed against the selection criteria. This measure scored a total of 13 in the assessment process and will therefore be taken forward for analysis.

4. Waiting times for access to services – This was put forward by a number of stakeholders including commissioners. This was assessed against the selection criteria and scored a total of 12, therefore assessed as a good measure but may require further work in terms of collection and could be included in phase 3.

5. Use of anti-psychotic drugs – Work is on-going but not sufficiently robust to include, however could be included in phase 3.

This process allowed these measures to be put forward for scrutiny against the criteria identified by the Quality & Outcomes sub-group:

1. Employment status - completeness
2. Employment status – in employment
3. Accommodation status - completeness
4. Accommodation - in settled accommodation
5. Equity of access – ethnicity
6. Serious untoward incidents
7. Admission rates
8. Section usage
9. Percentage of service users on CPA
10. Readmission rates
11. Percentage of discharges followed up within 7 days of people on CPA
12. Percentage of service users on CPA reviewed annually
13. IAPT KPI’s
14. Crisis resolution Home Treatment episode rates
15. Waiting times/ access to services.
16. MHCT – HONOS
17. Physical health- smoking cessation
18. Physical health – BMI / Waist
19. Physical health Check
20. Average no of bed days per annum
21. Average length of stay
22. Duration of untreated psychosis

Further information was gathered about each of the measures. A template (Appendix 2) was completed for each measure. The data definition and data source was identified for each of these measures (Appendix 3). Candidate measures that did not meet the criteria of being routinely collected consistently, and according to national definitions, were not put forward for further analysis.

The final list of measures to be included in the first phase testing are:

- Indicator 2 Proportion of patients on Care Programme Approach (CPA)
- Indicator 4 IAPT KPI indicators
  - IAPT 1: The proportion of people that enter treatment against the level of need in the general population i.e. the proportion of people who have depression and/or anxiety disorders who receive psychological therapies.
  - IAPT 2: The proportion of those referred that enter treatment i.e. the proportion of people who are referred for psychological therapies who receive psychological therapies.
  - IAPT 3: The number of people assessed as moving to recovery as a proportion of those who have completed a course of psychological treatment. This indicator only includes the people receiving treatment that are at ‘caseness’ on entry to treatment.
- Indicator 5a Accommodation status – completeness
- Indicator 5b Accommodation – in settled accommodation.
- Indicator 6a Employment status - completeness
- Indicator 6b Employment status - in employment
- Indicator 7 Equity of access – ethnicity
- Indicator 9 Section usage
- Indicator 11 Readmission rates
- Indicator 12a Average number of bed days

3.2 Data Analysis

Data analysis was undertaken using clustered data. Data was analysed separately both by the NHS Information Centre (NHS IC) and Care Pathways and Packages (CPPP) on behalf of the product Review Group- Quality and Outcomes sub group.

The parameters for the initial data analysis were:

i) data quality
ii) variation in data especially between clusters and between providers and over time
iii) looking at discrimination as far as possible i.e. how wide is the range, how much change, how far do data correlate
iv) Looking at correlations and improvements between outcome indicators at cluster level—we would hope to find some positive correlations in improvements.

NHS IC has access to two quarters of clustered data, Q2 2010/2011 and Q3 2010/2011. Where possible, NHS IC compared the clustered data against the national results. This included the settled accommodation and employment indicators.

<table>
<thead>
<tr>
<th></th>
<th>Trusts providing data in the quarter</th>
<th>Trusts who were able to provide clustered data in the quarter</th>
<th>Percentage of trusts submitting data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2 2010/2011</td>
<td>73</td>
<td>4</td>
<td>5.5</td>
</tr>
<tr>
<td>Q3 2010/2011</td>
<td>69</td>
<td>6</td>
<td>8.7</td>
</tr>
</tbody>
</table>

The data was anonymised and the trusts are referred to as 1 to 6. NHS IC can identify the trusts if any additional analysis is required.

The Care Pathways and Packages Project (CPPP) had access to a large data warehouse of clustered data from 7 providers. Data was extracted from the warehouse to perform analysis on the proposed indicators. Data from Q1- Q4 2010/2011 was used. The data was anonymised but CPPP can identify the trusts and can provide additional analysis if required.

The full data analysis report can be found at Appendix 4.

### 3.2.1 Summary of Findings

Below is a list of the indicators that were selected for analysis as part of phase 1 work, along with their descriptors. The narrative following each indicator descriptor summarises the discussion held on it by Quality and Outcomes subgroup members.

**Indicator 2: Proportion of patients on Care Programme Approach (CPA)**

The indicator is the numerator divided by the denominator, expressed as a percentage

**Numerator:** The number of people under adult mental illness specialties on CPA broken down by cluster

**Denominator:** The total number of peoples in contact with adult mental illness specialties broken down by cluster

Appendix 4: Tables 2, 3 and 4.

Data from both the NHS IC and CPPP shows that a surprisingly high proportion of people on Care programme Approach were in cluster 1-4 (Non-Psychotic, Mild/ Moderate/Severe) than might have been expected. There is some ‘odd’ data for individual Trusts, which could be explained by missing data. However, NHS IC data shows a reasonable consistency between Q2 and Q3.

All data appears to demonstrate a high variability between Trusts in the non-psychotic clusters (1-8).

It might be expected that more people in Cluster 3 (Non-Psychotic Moderate Severity) should be on CPA than in Cluster 2 (Common Mental health Problems- Low Severity with greater need), but this is not the case for most organisations.
The PRG Quality and Outcomes subgroup concluded that the accuracy and quality of clustering practice is not yet of a robust standard and it is important to investigate further so that we can address data quality issues.

Indicator 4: IAPT KPI Indicators
IAPT 1: The proportion of people that enter treatment against the level of need in the general population i.e. the proportion of people who have depression and/or anxiety disorders who receive psychological therapies
The indicator is the numerator divided by the denominator, expressed as a percentage
**Numerator:** the number of people who have entered psychological therapies (KPI 4).
“Entered psychological therapies” is defined as attending first therapeutic session, which may be during the same appointment as initial assessment.
**Denominator:** the number of people who have depression and/or anxiety disorders (local estimate based on Psychiatric Morbidity Survey (KPI 1))

IAPT 2: The proportion of those referred that enter treatment i.e. the proportion of people who are referred for psychological therapies who receive psychological therapies
The indicator is the numerator divided by the denominator, expressed as a percentage
**Numerator:** the number of people who have entered psychological therapies (KPI 4).
“Entered psychological therapies” is defined as attending first therapeutic session, which may be during the same appointment as initial assessment.
**Denominator:** The number of people who have been referred for psychological therapies (KPI3a) this is a count of referrals that the service provider has received during the reporting period.

IAPT 3: The number of people assessed as moving to recovery as a proportion of those who have completed a course of psychological treatment
This indicator only includes the people receiving treatment that are at ‘caseness’ on entry to treatment
**Numerator:** The number of people who are “moving to recovery” (KPI 6) This is a count of all those people at initial assessment achieved “caseness” and at final session did not.
“Caseness" is defined by a score of 8 or more on GAD7 and 10 or more on PHQ-9.
**Denominator:** = a – b
a) The number of people who have completed treatment (KPI 5) This is a count people who have left treatment within the reporting period for any reason including: planned completion; deceased; declined treatment; dropped out (unscheduled discontinuation); or unknown.
b) The number of people who have completed treatment not at clinical caseness at treatment commencement

Appendix 4: Table 5.
Data was analysed from the NHS IC data set. The data quality was thought to be reasonable. It was concluded by the Quality and Outcomes subgroup that these indicators would be useful quality indicators for the relevant care clusters. This work will be included in the next stage work to analyse by cluster.

**Indicator 5a: Accommodation status – completeness**

Indicator: Proportion of adults on Care Programme Approach receiving secondary mental health services that have a valid entry recorded for their settled accommodation indicator

**Numerator:** The number of people aged between 18 and 69 who accessed secondary mental health services during the quarter and were either on CPA at the end of the reporting period or had a period of care on CPA within the reporting period, that had valid entry for settled accommodation. The settled accommodation indicator used is the most recent entered for the patient in the last 12 months. Valid entries are those with settled accommodation values of '1' and '0'.

**Denominator:** The number of people aged between 18 and 69 who accessed secondary mental health services during the quarter and were either on CPA at the end of the reporting period or had a period of care on CPA within the reporting period

Appendix 4; Table 6 and 7.

*The PRG Quality and Outcomes subgroup concluded that the data indicates important discrepancies between The NHS IC and CPPP data which requires further exploration. As an indicator it may be useful in conjunction with 5b and not as a standalone indicator.*

**Indicator 5b: Percentage in settled accommodation**

Indicator: Proportion of adults on Care Programme Approach receiving secondary mental health services in settled accommodation

**Numerator:** The number of people aged between 18 and 69 who accessed secondary mental health services during the quarter and were either on Care Programme Approach (CPA) at the end of the reporting period or had a period of care on CPA within the reporting period, that were recorded as being in settled accommodation. The settled accommodation indicator used is the most recent entered for the patient in the last 12 months.

**Denominator:** The number of people aged between 18 and 69 who accessed secondary mental health services during the quarter and were either on Care Programme Approach (CPA) at the end of the reporting period or had a period of care on CPA within the reporting period

Appendix 4: Tables 8, 9 and 10.

The data demonstrated surprisingly little variation by cluster for people in settled accommodation. Although there was no consistency in the cluster most likely to have a valid settled accommodation indicator, the least likely to have a valid settled accommodation indicator is cluster 21 (Cognitive Impairment or Dementia Complicated- High Need).
The PRG Quality and Outcomes subgroup requested further analysis of this indicator with data for all clustered service users and not only those service users on CPA.

Indicator 6a Employment status- completeness

Indicator: Proportion of adults on Care Programme Approach receiving secondary mental health services that have a valid entry recorded for their employment status

Numerator: The number of people aged between 18 and 69 who accessed secondary mental health services during the quarter and were either on CPA at the end of the reporting period or had a period of care on CPA within the reporting period, that had a valid entry for employment. The employment status used is the most recent entered for the patient in the last 12 months. Valid entries are those with employment status values of 01, 02 or 03.

Denominator: The number of people aged between 18 and 69 who accessed secondary mental health services during the quarter and were either on CPA at the end of the reporting period or had a period of care on CPA within the reporting period

Appendix 4: Table 11 and 12

The PRG Quality and Outcomes subgroup concluded that the data indicates important discrepancies between The NHS IC and CPPP data which requires further exploration. As an indicator it may be useful in conjunction with 6b and not as a standalone indicator.

Indicator 6b: Percentage in employment

Indicator: Proportion of adults on Care Programme Approach receiving secondary mental health services in employment

Numerator: The number of people aged between 18 and 69 who accessed secondary mental health services during the quarter and were either on CPA at the end of the reporting period or had a period of care on CPA within the reporting period, that were recorded as being employed. The employment status used is the most recent entered for the patient in the last 12 months.

Denominator: The number of people aged between 18 and 69 who accessed secondary mental health services during the quarter and were either on CPA at the end of the reporting period or had a period of care on CPA within the reporting period

Appendix 4: Tables 13, 14 and 15.

The NHS IC national data shows that a higher proportion of people in the lower clusters are more likely to be in employment and demonstrates some relationship with clusters as would be expected. For example: Cluster 2 (Common Mental health Problems- Low Severity with greater need) twenty per cent of people are in employment whilst in Cluster 16 (Dual Diagnosis) only one percent of people are in employment.

The PRG Quality and Outcomes subgroup felt that this is a promising indicator as it may measure recovery and we are clear about what good looks like. The PRG sub
group also requested further analysis of this indicator with data for all clustered service users and not only those service users on CPA.

Indicator 7: Equity of access – ethnicity

Indicator: Ethnic coding data quality

**Numerator:** Care spells with valid coding (excluding "not stated" and "not known")

**Denominator:** Total Care spells which include a care element (see IC definitions for IC_CARE_STATUS for “admitted” and “only non-admitted”, MHMDS Statistics: Data Quality and Method)

Appendix 4: Table 16.

*The PRG Quality and Outcomes subgroup concluded that there are “reasonable” data on ethnicity however developing a meaningful quality indicator would require population data and there would be considerable “interpretation” challenges. This measure requires further work in order to progress.*

Indicator 9: Section usage

Indicator: Proportion of inpatients detained on section 2 or 3 of the Mental Health Act

**Numerator:** number of people whose highest legal status equates to section 2 or 3, in the reporting period. Broken down by cluster.

**Denominator:** number of inpatient episodes in the open during the period (this will include opened during, closed during and open throughout the period). Broken down by cluster

Appendix 4: Tables 17, 18 and 19.

There are significant differences between IC and CPPP data. The NHS IC data shows some internal consistency, for example, between Q2 and Q3 a plausible “upward trend” as clusters become more complex/severe. The rates of detention are surprisingly high, for example around 20% for clusters 1 – 3 and 70% for clusters 12 -14.

Whilst CPPP data show a lower percentage of detained figures, around ten percent for Clusters 1 – 3 and 20% for clusters 12-14. However CPPP data by provider looks very variable, for example, for cluster 6 one Trust has 100% and another 0% detained.

*The PRG subgroup concluded that the initial results from this indicator are misleading. However there was agreement to undertake more work on what would constitute a good result before an indicator can be developed.*

Indicator 11: Readmission rates

**Indicator:** The proportion of people readmitted to in-patient psychiatric care within the 90 days of discharge.

**Numerator:** The number of people readmitted to in-patient facility within 90 days of discharge
**Denominator**: The total number of people discharged from a in-patient facility in the reporting period

Appendix 4: Table 20.

The data demonstrated that in Cluster 8 (Non-Psychotic Chaotic and Challenging Disorder) and cluster 15 (Severe Psychotic Depression) there are high rates of readmissions, which would be expected. There is an anomaly with Cluster 21 (Cognitive Impairment or Dementia (High Physical or Engagement) and this may be explained by underlying data rules, for example, the system rule that ward leave should not be for more than 28 days long resulting in people being admitted on a PAS and then immediately sent back on leave.

Readmission rates for cluster 1-5 shows that people to these clusters are admitted and readmitted which is unexpected.

The PRG Quality and Outcomes subgroup agreed that this should be a useful indicator and noted that clearly low readmission rates are desirable although it is worth noting there can be a link with length of stay, that is, there is a tendency for low length of stay to correlate with higher readmission rates. A conclusion was reached that further work needs to be done on a national definition for use with MHMDS.

**Indicator 12a: Average number of bed days**

Indicator: Average number of bed days broken down by diagnosis and cluster

**Numerator**: Total number of bed days

**Denominator**: The number of people who have been in contact with specialist mental health services in the same year

Indicator should be broken down by cluster if data is available

Appendix 4: Tables 21, 22 and 23.

The data from the NHS IC and CPPP was consistent in that bed-days increase sharply with cluster which is what is to be expected.

It was noted that the data source could be skewed by appropriate use of long term beds, for example Rehabilitation and forensic services where there are longer lengths of stay.

The PRG Quality and Outcomes subgroup felt that this is a promising indicator. It summarises neatly the total bed usage per person receiving care and for most clusters low figures should be a good outcome.

### 3.3 Conclusions

Data quality is an issue for a number of the indicators and particularly when analysed on an individual provider basis. This is a significant concern as good data quality is a key requirement in order to use indicators for the intended purpose.

There appears to be little consistency in the data which is probably to be expected from the first set of indicators, and the quality and accuracy of clustering at this early stage of use.
Most people felt that the data should be run but not presented in the indicator format. The only exception seems to be the number of bed days.

Indicators where data quality was acceptable and the indicator appears to be appropriate to be recommended for use are: Indicator 2 proportion of people on CPA; Indicator 4 – IAPT KPI indicators; Indicator 5a & b Accommodation, Indicator 6a & 6b Employment; and Indicator 12a Average number of bed days.

For use at a national level the following Indicators are thought to be promising but require more work are; Indicator 7 equity of access for ethnicity, Indicator 9 Section Usage; Indicator 11 and Readmission rates.

### 3.4 Recommendations

The subgroup recommend that analysis is undertaken over a further period of data collection to gain understanding over a longer time period, promote data quality and to allow for improvements in the accuracy of clustering. It is also important to understand the impact of re-clustering on the indicators.

Additionally a means of looking at the data from a public health and commissioning perspective is advocated to identify inequalities in care.

Further work is required to promote and develop the collection, analysis and review of the selected items in order to encourage improvements in data quality. It is important this engages service users and the responsible clinicians within provider Trusts.

If data are used for explicit purposes, for example, monitoring section rates as a quality marker, this may encourage a focus on data which looks questionable and may result in actions to improve it. Feeding back information to clinicians in a systematic manner may too have a positive effect on data quality.

The data needs to be tested over a longer period to better understand the variation in Provider Trusts.

Work Stream 3 work to be endorsed to pursue the indicators that have been identified as useful but were unable to be utilised at this stage of the work. A full list of the indicators/measures that have been recommended for perusal can be found at Appendix 6.

Alignment of this work with the Outcome measures suggested within ‘No Health Without Mental Health’, ‘The Public Health Outcome Framework’ and ‘the Social Care Outcomes framework’ to ensure a fully integrated approach to the development of a comprehensive framework for outcome measures within the PbR process is established within the work stream 4 proposed within this report.
4.0 Work Stream 2

Web-based tool

The IMHSeC group (a partnership between The Pharmaceutical Serious Mental Health Initiative (PSMI), the Department of Health Mental Health Directorate and the former National Mental Health Development Unit) is working with the PbR Quality & Outcomes sub group. They wish to support the group’s objectives in delivering a comprehensive range of quality indicators and outcomes measures as an integral part of the mental health PbR system.

The IMHSeC project group are working on a web-based tool that will provide guidance on the content of the care package for each of the clusters. This work was identified as being an important step in enabling the linkage between inputs and outcomes to be established and to aid understanding of the overall patient journey. The key features of this work are to collate work already carried out, to provide clear guidance on which interventions could be delivered/commissioned within each of the clusters, and to link to NICE guidance and standards. This work is being done in partnership with a wide range of stakeholders.

The aim is to provide a useful tool to help commissioners and service providers to set out local arrangements for care pathways linked to the care clusters. To achieve this it was thought helpful to first develop a high level view of good practice pathways. This can then be used locally as a starting point, and a framework for more detailed local planning and operationalisation.

4.1 Method

A working group was formed to pull together existing work on care packages and pathways, using the group’s knowledge and expertise to develop a workable tool.

The intention has been to develop a web site of pathways that:

- Build on existing good practice.
- Build in to the pathways existing good evidence and guidance, notably NICE guidance and NICE quality standards.
- Promote the right values and ethos of care, including social inclusion, recovery and personalization, and avoids any potential mechanistic pitfalls in thinking about pathways.
- That support good clinical decision making it the bedrock of high quality care.
- Provide greater clarity and consistency of care, whilst maintaining relevance to individual care needs and building in to the model flexibility to meet these in care settings.
- To have pathways that are inclusive, e.g. not age exclusive, allowing access to the best care for everyone, but that allows for highlighting real world specific issues with some broad care groups, and that supports good individualized/personalized/person-centered care.
- Fit with and support integration of mental health PbR developments over time, such as developments on care clusters for other care settings (i.e. forensic services, learning disabilities, and CAMHS) and the developing quality and outcomes indicators.
• That is an accessible web site linking the pathways to a library of resources to help localities with their planning.
• That is a versatile site to develop over time and bring in future evidence and developments and continue to evolve as a coherent single resource supporting developments and improvements in local care services.

To date the content of care packages for all clusters is nearing completion and an initial prototype of the web based tool for their demonstration will be available by autumn 2011.

4.2 Conclusions and recommendations
There is significant interest in completing this work from all stakeholders. It is clear that the website needs to be available as soon as possible to provide guidance to those areas struggling to meet current timescales for PbR preparation.

The potential benefits include:
- Support for practitioners in identifying and delivering care packages
- Information for service users, greater clarity on choices available
- Opportunities for comparisons and benchmarking
- Future potential for best practice tariff development

A key requirement for the guidance tool will be that it is updated and maintained to incorporate new innovations and evidence as it becomes available. A host organisation that can undertake this work is required. Ongoing alignment with NICE will be a key feature for this tool in the future.

The IMHSeC project has made an approach to the National Collaborating Centre as a potential host for the web site and discussions are ongoing to progress this development.

The continued development of the tool and the identification of a host for the site is recommended.

5.0 Work Stream 3
Recommending further work that could make better use of existing data; the newly collected MHCT and cluster allocation data in 2012/13.

Assuming that work stream 1 is supported and endorsed, the need to build upon this during 2012/13 is recommended. Work Stream 1 has identified that we collect a number of indicators and measures that we are not currently making adequate use of in linking to the currency method.

Work has already commenced to scope the use of HoNOS and individual items within the MHCT on a cluster basis. This work is initially being developed by the CPP Pilot sites, the RCPsychs and SLaM.
The overarching aim of this piece of work is to test the utility of using the MHCT to measure outcomes by cluster in routine practice. The objective being to develop guidance on providing reliable measurement of routine clinical outcome using available datasets by utilising the CPP and SLAM data to explore expected and actual outcomes and variation.

The process that will be adopted to undertake this work is as follows:

- A clinical model, based on indicative MHCT scales and expected outcomes, will be developed jointly by the CPPP and the RCPsych for each of the clusters.
- Descriptive statistics will be used to compare expected outcomes with actual outcomes (i.e. mean change with confidence intervals, percentages of service users that show positive improvement, mitigation of deterioration and increase in scores).
- Descriptive statistics will be used to describe any variation that is observed to occur at service level.
- Relationships between MHCT scales will be explored using clinical working groups and factor analytic techniques.

A fuller explanation of this work can be found at Appendix 5.

Work Stream 1 identified that there are a number of metrics that we currently collect that with further work and assessment may be valuable to add to the phase 1 recommendations. A list of these can be viewed at appendix 6.

It is proposed that the following is endorsed as a work plan to establish recommendations for a wider range of indicators and outcome measures to have been tested and recommended for use form 2013/14. This will include:

- PROMs
- PREMs
- HoNOS
- Specific MHCT items
- Items that were identified in work stream 1 but need more work - Appendix 6

It is recommended that the next phase of project work to progress these objectives is resourced and endorsed to ensure this is achieved.

6.0 Work Stream 4
Outcome measures.

The need for outcomes measures to be developed for use is extensively documented in current key national strategies relating to mental health care. These include the publications ‘No health without mental health: A cross government mental health outcomes strategy for people of all ages; Health Lives, Healthy People: Transparency in Outcomes proposals for a Public Health Outcomes Framework; NHS Outcomes Framework 2011/12 and Transparency in outcomes: a framework for adult social care’. 
With the exception of HoNOS, we are extremely limited in the number of validated outcome measures that are routinely collected across the country. Additionally we believe that there are a number of gaps where new measures need to be developed in order that we can demonstrate their performance.

We recommend a longer term project plan is established to identify, test and recommend for use a number of additional/new outcome measures that will complete this overall process. This would aim to produce recommendations for their use in 2013/14 and will require more detailed scoping and planning to establish a robust project plan.

7.0 Overall summary and recommendations

The role of quality indicators and outcome measures as an integral component of the currency model for Mental Health services will continue to require development in an iterative way over the coming years as the overarching model is developed. A growing emphasis on outcomes is essential and will form the drivers for change and innovation that are required to sustain progress for all parts of the NHS.

The initial work undertaken raises a number of issues and challenges, not least the need to achieve improvement in data quality and establishing a robust approach for demonstrating outcomes as a means of incentivising care delivery.

However there is also much to be positive about and the initial work demonstrates that it is possible to collect good quality data across a range of meaningful areas that could be used to begin to demonstrate the quality of care delivered to service users on a cluster basis.

It is recommended that the PRG support the following recommendations:

The National MH PbR Project Board should endorse:

1. Further evaluation and refinement of the (8) indicators identified as promising quality measures so that:
   a. The construct of the indicators is optimized for demonstrating quality
   b. The indicators are monitored over a wider range of providers and over more quarters.
2. Further work to investigate issues of data quality and/or divergence of practice between providers on such issues as placing users on CPA and allocation to clusters.
3. Further work to investigate the best way of using components of the clustering tool to demonstrate improvements in patient outcomes/ recovery.
4. And resource further project work that can build on the work already undertaken by adding additional metrics and expanding the number and range of indicators and outcome measures on a cluster basis, undertaking robust field testing and making recommendations for their use on a national basis.
5. Resource further analysis to be undertaken as ‘business as usual’ by NHS IC from 2011/12 data onwards, when cluster data is mandated and a national picture available.
6. Resource and establish an ongoing project structure that can deliver a comprehensive outcomes approach for PbR through to the implementation phase that builds upon the existing work addresses the gaps identified. (see appendix 8)

7. The development of an overarching framework that combines the work with the national outcomes strategies and the ongoing production of NICE guidance and standards.

Further work must ensure a broader stakeholder engagement, particularly to ensure service users are fully involved in the overall process.