

# **Mental Health – Fee Calculation and Impact Assessment**

## **1. Background**

CMRF data is the best available on work done and costs incurred in all Mental Health cases. However, some consultation responses indicated that there were differences in the way providers reported the data. In addition, the CMRF data does not always show sufficient information on what happened during a case. We therefore decided to conduct a file review as a further source of information to cross-check with CMRF data.

Files representing 3% of all claims made in 2005-06 were requested from providers in December 2006 and reviewed in January 2007. We are very grateful to providers who sent in the requested files, which have enabled us to build up a more accurate picture of the work done and costs incurred in mental health cases. The sample was designed to be representative of all cases in terms of proportions of files from each region, proportions of civil/criminal cases and proportions of files from TFF or Non-TFF providers. The file review gave information on the volumes of claims which involved work at each level, the type of work undertaken, the costs of this work, the amount of travelling and waiting, hearings attended/scheduled, outcomes etc. The data collected during this file review exercise was used as a basis upon which to calculate the levels at which the new fees should be set.

## **2. Calculation of Fees**

### **2.1. Additional Travel Payment**

Additional travel payments will be paid for cases at locations at which we consider clients' access to services could be otherwise at risk. The measurement of risk to access will take into account a number of factors including number of tribunals listed at that location, number of providers in the area and capacity of those providers. CMRF data does not give us comprehensive information about where clients are located. Until the fee scheme is published and further information becomes available following analysis of information from the MHRT secretariat and discussions with providers, we are unable to specify exactly those locations at which cases will receive the additional travel payment.

However, for the purposes of calculating the levels at which the standard fees should be set, we required initial estimates of what we expect the additional travel payments to be. These were calculated as set out below.

- Available CMRF data on distances between providers and the hospitals they serve suggested that defining as “remote” those hospitals with fewer than three providers within 50 miles of their premises set an appropriate balance between distance criteria and

maintaining sufficient provision in order to preserve access. Using these criteria, a provisional list of “remote” hospitals was drawn up.

- The following were extracted from data collected via file review. For each parameter, the suffix, L, pertains to the proposed new level of fee -
  - o The average distance,  $D_L$ , travelled in all cases involving “remote” hospitals.
  - o The average number of journeys,  $N_L$ , made during these cases.
  - o The average cost per mile,  $c_L$ , incurred on these cases.
- Estimates of additional travel payments were then defined for each level, L, of fee as –

$$N_L (D_L - 50)c_L$$

- These initial payments were then lowered to reflect the fact that providers often visit more than one client when visiting a hospital, meaning that the costs of such journeys are shared between several cases. No reliable data is held on the frequency of such multiple visits, so a decision was taken to set the fee reduce the fee using an average ratio of 3 journeys per 4 cases. This meant that the fees were only slightly reduced, retaining an incentive to travel to those clients and maintain access.

## **2.2. Standard Fees and Additional Hearing Fee**

The basis for calculation of fee levels was the set of payments made to all cases reviewed as part of our file review exercise. For providers remunerated under the Tailored Fixed Fees (TFF) scheme, these payments were the TFF payable minus any disbursements, and for those providers outside the scheme it was the sum of all profit and counsel costs claimed.

Further to the above, travel fees were allocated to the most expensive 2.28% of cases at each level, considered separately both in and outside of London.

### **2.2.1. Level 1 Fee**

Prior to calculating fee levels for the scheme, descriptive statistical analysis was performed on the data collected via file review to ascertain the reliability of the sample.

Consideration of the 95% confidence intervals of means and standard deviations for cases at each fee level within the sample produced the following table.

*Table 2.) Errors associated with 95% Confidence of Mean and SD*

Fee Level	Proportional Error of 95% Confidence Interval of Mean	Proportional Error of 95% Confidence Interval of Standard Deviation
Non-MHRT	10.42%	9.80%
1	49.15%	34.60%
2	7.60%	4.90%
3	6.70%	7.48%

The calculation of the fees is dependent upon a combination of the mean and the distribution of costs at each level. It can be seen that the error associated with both of these measures for level 1 cases is high, implying an associated risk of a high level of error in any calculated fees at this level.

A decision was therefore taken to set the level 1 fee at a level of £140, which is higher than suggested by the file review data (which was £98), and which we believe represents sufficient average remuneration for the work covered by this level.

### 2.2.2. Level 3 Fee

The fee for level 3 was calculated based upon the set of all costs which could be isolated as pertaining to level 3\* for all cases not involving additional hearings.

The fee was defined as the maximum average of the sum of the costs of all such cases, such that the cost of all cases where costs exceeded the cost of the highest cost case contained within the average was greater than or equal to the average multiplied by our exceptional case multiplier of 3.

### 2.2.3. Additional Hearing Fee

The additional hearing fee was calculated based upon the set of all costs which could be isolated as pertaining to level 3 for all cases involving one additional hearing.

The fee was defined as the difference between a notional fee and our calculated level 3 fee. The notional fee was defined as the maximum average of the sum of the costs of all of the cases involving an additional hearing, such that the cost of all cases where costs exceeded the cost of the highest cost case contained within the average was greater than or equal to the calculated level 3 fee multiplied by our exceptional case multiplier of 3 plus the average minus the calculated level 3 fee.

### 2.2.4. Non-MHRT Fee

The non-MHRT fee was calculated based upon the set of all costs which could be isolated as pertaining to non-MHRT work.

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\* See appendix A for details of costs that were able to be isolated for each fee level.

An initial fee was defined as being the maximum average of the sum of the costs of all such cases, such that the cost of all cases where costs exceeded the cost of the highest cost case contained within the average was greater than or equal to the average multiplied by our exceptional case multiplier of 3.

In the case of non-MHRT work, an optimal solution was reached with no exceptional cases, which in reality is not feasible, so a condition was implied upon the calculation to ensure that around 15% of cases would be exceptional at this level under the fee scheme.

The Non- MHRT fee covers a number of different types of work, including some which will now be classed as MHRT. We therefore removed a proportion of funding to increase the Level 1 and 2 MHRT fees- this also reflects the higher priority of this work. The redistribution to Level 2 MHRT work increased this fee by £32.

### **2.2.5. Level 2 Fee**

The fee for level 2 was calculated based upon the set of all costs which could be isolated as pertaining to level 2 work.

The fee was defined as the maximum average of the sum of the costs of all such cases, plus the additional money redistributed from Non-MHRT cases, such that the cost of all cases where costs exceeded the cost of the highest cost case contained within the average was greater than or equal to the average multiplied by our exceptional case multiplier of 3.

## **3. Impact Assessment**

Once calculated as outlined above, the fees have been mapped onto CMRF data for the year 05/06 in order that an assessment can be made of the likely impacts of introduction of the scheme. The following sets out the methodology used.

### **3.1. Determination of Proportions Within the File Review Sample**

Once fees had been calculated it was possible to ascertain the following proportions for each level of fee for those cases within our sample of file review data:

- 3.1.1. Proportion that the volume of cases at the given level represents of the total volume of cases.
- 3.1.2. Proportion that the cost of cases at the given level represents of the total cost of cases.
- 3.1.3. Proportion that the volume of cases which would escape the standard fee at the given level represents of the total volume of cases at the given level.

3.1.4. Proportion that the cost of cases which would escape the standard fee at the given level represents of the total cost of cases at the given level.

These proportions were calculated separately for cases inside and outside of London.

The proportions were then used to determine the corresponding proportions for providers within our CMRF data as set out below.

### **3.2. Mapping of Proportions to CMRF Data – Non Exceptional Cases**

The ratio of the number of claims submitted to the number of cases within our file review sample data was calculated. This ratio was 1.17 claims per case.

For each provider within our CMRF data, the number of cases conducted at each level was defined as the total number of claims reported by the given provider, divided by our claims per case ratio of 1.17, multiplied by the relevant ratio for each level as calculated at 3.1.1. above.

The cost of these cases was then calculated as the relevant fee multiplied through by the volume of cases at each level.

### **3.3. Mapping of Proportions to CMRF Data – Exceptional Cases**

Although every effort was made to ensure that the files submitted for file review were as representative of the population as a whole as possible, there are such large variations in reported costs between providers historically that it was deemed necessary to tailor the proportion of cases that would be likely to escape to each individual provider.

This was achieved via use of z-transformations to approximate the distributions of both the file review costs and individual providers' costs to normal distributions. For each provider, an exceptional case ratio was then defined as the ratio between the probability of the provider's costs equalling or exceeding the mean of the normally approximated file review costs distribution and the probability of costs from the file review equalling or exceeding the same was calculated.

For each provider, the number of cases conducted at each level that would be expected to escape the standard fee scheme was defined as the number of cases at the given level defined at 3.2 above, multiplied by the product of the ratio for the relevant level calculated at 3.1.3. above and the individual provider's exceptional cases ratio. Where this product was greater than or equal to one, it was said that all of the provider's cases at the given level would be exceptional.

The total cost of those cases that are expected to escape the standard fees for each provider were then calculated as the total cost of the provider's reported claims, multiplied by the product of the ratio for the relevant level

calculated at 3.1.2. above, the ratio for the relevant level calculated at 3.1.4. above, and the individual provider's exceptional cases ratio. Where this product was greater than or equal to one, it was said that all of the provider's costs at the given level would relate to exceptional cases.

The total amount expected to be paid to each provider under the new scheme was ascertained in this way, and was compared to the total claimed in the year 05/06 in order to determine expected variations in providers' incomes.