Measuring Outcome: an audit of the Clinical Psychology & Psychotherapy Service (North & Mid-Bedfordshire)

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Introduction
The Clinical Psychology and Psychotherapy Service in North and Mid-Bedfordshire supports the call for Clinical Governance and its emphasis on, amongst other things, the importance of quality assurance, risk management, clinical effectiveness and the meaningful involvement of users. For example, the service has implemented these principles and routinely mails the Clinical Outcomes in Routine Evaluation Outcome Measure (CORE-OM) to all clients at the three main stages of treatment: assessment (A), beginning of treatment (F, First session), and discharge (L, Last session).

The CORE-OM is a brief self-report questionnaire that was designed to measure overall psychological distress, covering four dimensions: subjective Well-being, Symptoms, Functioning, and Risk (of harm to self and to others). It has been extensively piloted (Barkham et al 1998, Evans et al 2000) and the resulting data suggest that it:

- has considerable clinical face value;
- has supportive validity and reliability;
- distinguishes between clinical and non-clinical populations; and
- is brief and acceptable to clients and therapists.

The measure addresses global distress and as such is suitable as an initial screening tool and outcome measure. Additionally, the CORE-OM can be used alongside other problem-specific measures such as the Beck Depression Inventory (Beck et al 1961). Since its launch in 1998, the CORE-OM is increasingly being adopted as a standard outcome measure in therapeutic services across NHS primary, secondary and tertiary therapeutic services (Evans et al 2000).

The purpose of this article is to report on an audit that was conducted in July 2004. The aim of the audit was to ascertain whether the Clinical Psychology and Psychotherapy Service
effectively treated clients i.e. whether clients’ post-treatment CORE-OM scores showed significant improvement in comparison with their assessment or pre-treatment CORE-OM scores.

**Procedure**
Clients were sent their assessment CORE-OM approximately one month before their assessment appointment. The beginning of treatment CORE-OM was enclosed with a letter offering treatment. The post-therapy CORE-OM was sent out with a letter about four days after the last therapy session. The service administration team manually recorded all sent and received questionnaires. On receipt of a CORE-OM, an assistant psychologist scored the questionnaire.

The mean scores for each dimension (Well-being, Problems, Functioning, Risk) and All items (the total mean score for all 34 questionnaire items) were then entered on the audit database. The database included the results of questionnaires received between January 2000 and June 2004. The statistical package SPSS (Release 12.0.1 for Windows) was used for the recording of data and analysis. The analysis compared the means for sets of data of the All items and Risk scores at the three different stages of treatment (A, F, L) as changes in these scores provide a good indication of outcome and the efficacy of treatment. Inferential statistics (paired samples t-tests) were used.

Following an earlier departmental decision, it was also agreed that if a CORE-OM was returned prior to assessment displaying high risk, the assistant psychologist would highlight the relevant risk questions/responses and forward the questionnaire to the assessing clinician. The clinician would then review the relevant items and could take action if felt necessary. For example, the service developed standard response letters to highlight risk to the referrer and to provide information to the client on how to access emergency services.

**Findings**

**Response Rate**
The manual record held by the administrative staff was used to calculate the response rates for all CORE-OMs sent and received between 16th July 2001 and 15th June 2004. The response rate for the entire range of data used on the database could not be calculated as only those questionnaires sent and received are currently recorded on the audit database. Furthermore, the manual records only dated back to 16th July 2001. The response rates are summarised in Table 1.

**Table 1: Response rates at each stage of treatment (N = 1630)**

<table>
<thead>
<tr>
<th>STAGE</th>
<th>Sent</th>
<th>Received</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment</td>
<td>1125</td>
<td>676</td>
<td>60%</td>
</tr>
<tr>
<td>First Session</td>
<td>322</td>
<td>167</td>
<td>52%</td>
</tr>
<tr>
<td>Last Session</td>
<td>183</td>
<td>94</td>
<td>51%</td>
</tr>
</tbody>
</table>
Table 1 included clients who were waiting for assessment and treatment as well as clients who were in treatment at the time. All 200 cases on the database who had completed treatment in the service and had returned at least one questionnaire were utilised in the outcome audit. Table 2 presents a breakdown of the number of questionnaires returned by clients who had completed treatment.

Table 2: Breakdown of CORE-OMs received from discharged clients (N = 200)

<table>
<thead>
<tr>
<th>STAGE</th>
<th>Number of cases</th>
<th>% of all CORE-OMs returned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment only</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Final Session only</td>
<td>34</td>
<td>17</td>
</tr>
<tr>
<td>Last Session only</td>
<td>24</td>
<td>12</td>
</tr>
<tr>
<td>A and F only</td>
<td>61</td>
<td>30.5</td>
</tr>
<tr>
<td>A &amp; L only</td>
<td>30</td>
<td>15</td>
</tr>
<tr>
<td>F &amp; L only</td>
<td>17</td>
<td>8.5</td>
</tr>
<tr>
<td>A, F and L</td>
<td>28</td>
<td>14</td>
</tr>
</tbody>
</table>

Outcome: Mean Scores for All items
A comparison of the pre- and post-therapy mean scores for All items are represented in Table 3. Fifty-eight cases returned at least an assessment (A) and a discharge (L) questionnaire. The difference between the assessment (1.69) and discharge (1.09) CORE-OM scores for All items was statistically significant (t = 6.13, p<0.001).

Similarly, analysis of the forty-five cases who returned at least a beginning of treatment (F) and a discharge (L) questionnaire showed that the difference between the beginning of treatment (1.68) and discharge (1.00) CORE-OM scores for All items was statistically significant (t = 5.27, p<0.001).

Outcome: Mean scores for Risk
Table 4 summarises an analysis of the pre- and post treatment mean scores for Risk. The difference between the assessment (0.31) and discharge (0.20) CORE-OM scores for Risk was statistically significant (N = 58, t = 2.32, p<0.05).

Table 3: Results for All items scores

<table>
<thead>
<tr>
<th>Comparison</th>
<th>N</th>
<th>Means</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment vs. Discharge</td>
<td>58</td>
<td>A = 1.69</td>
<td>p&lt;0.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>L = 1.09</td>
<td></td>
</tr>
<tr>
<td>Beginning of Treatment vs. Discharge</td>
<td>45</td>
<td>F = 1.68</td>
<td>p&lt;0.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>L = 1.00</td>
<td></td>
</tr>
</tbody>
</table>
For the 45 cases who returned at least a beginning of treatment (F) and a discharge (L) questionnaire, the difference between the pre-therapy (0.33) and post-therapy (0.13) CORE-OM scores for Risk was statistically significant (t = 2.28, p<0.05).

Discussion

Response Rates
The response rate figures in Table 1 (N = 1630) revealed that more than half of all clients returned a CORE-OM at all three stages of treatment (A, F, L). Response rates of 40-60 per cent are typical for mail outcome surveys (Stallard 1995). However, these response rates raise questions about the difference between respondents and non-respondents and whether respondents are representative of the total population. For example, several authors (Rey et al 1999, Stallard 1995) have noted that outcome studies tend to report high rates of satisfaction. But, non-respondents are very often more dissatisfied with the overall service than respondents. Therefore, sole reliance on postal questionnaires has a risk of positively skewing the results. Some services consequently use telephone or personal interviews to elicit non-respondents views on outcome.

The analysis of questionnaires returned by those who completed treatment (N=200) revealed that 54% returned two questionnaires and 14% returned all three. Overall, 88% of clients returned pre-treatment questionnaires (e.g. A or F), whereas only 49.5% of clients returned post-treatment (L) questionnaires. A further possible explanation for the difference between pre- and post-treatment response rates is that clients may lose the incentive to return questionnaires once they have been treated and problems are resolved.

All items and Risk
Statistical analysis confirmed that clients reported a significantly greater level of psychological distress (as measured by their questionnaire total ‘All items’ and Risk scores) at the assessment or beginning of treatment, in comparison to when they have undergone treatment in the service. Consequently, the results of the audit demonstrate that the Clinical Psychology & Psychotherapy Service has been effectively treating clients in the time period under investigation.

The National Service Framework for Mental Health (DOH 1999) emphasised the need for formal risk assessment and risk management in providing effective care for people with mental health problems. The management of risk is therefore one of the primary responsibilities of the service. All clinicians in the department have welcomed the use of the CORE-OM as a screening measure of risk in service users prior to assessment.
Conclusions & Recommendations
Overall, the results of this audit demonstrated that the service effectively treated clients, as clients' post-treatment CORE-OM scores on both All Items and Risk showed significant improvement in comparison with their assessment or pre-treatment CORE-OM scores.

The CORE-OM has also proved to be a useful tool in the management of Risk of clients referred to the department, as procedures have been implemented which enable the service to identify and respond to high-risk clients and their referrers, when necessary. Further audit is necessary to ascertain user and referrers' views on the standard letters that are sent out to them when a risk to the client or others is identified. The department could also consider whether it would be cost-effective to elicit non-respondents views on outcome, for example by means of telephone or personal interviews.

The Clinical Psychology and Psychotherapy Service in North and Mid-Bedfordshire puts time and resources into gathering outcome data. This has proved a worthwhile endeavour and has enabled the service to gather a growing body of data on its clinical effectiveness. User feedback concurred with the growing evidence base for psychological therapies and enables the service to monitor and review its standards. This is essential in the context of Clinical Governance which requires all professions to review the quality and effectiveness of their clinical work through ongoing audit.

References

Useful Web-sites
http://www.psyc.leeds.ac.uk/ptrc/index.htm
http://www.coreims.com
http://www.spss.co.uk