Cochrane review of patient reported outcome measures (PROMs) in the routine monitoring of common mental health disorders (CMHDs)

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Declaration of interests: TK, MM, BS and SG are conducting the PROMDEP feasibility study for a trial of PROMs in depression in primary care in the UK
Rationale for the review

- PROMs have been promoted to involve patients in their own care and help professionals make better treatment decisions.
- PROMs may be costly in terms of professional time given the numbers of patients with CMHDs, especially in primary care.
- Even such simple quality improvement strategies should be supported by evidence of clinical and cost-effectiveness.
- There has been no systematic review of the use of PROMs in the routine outcome monitoring of CMHDs.
Aims

• To conduct a comprehensive systematic review of the use of PROMs in CMHDs, in terms of improving outcomes for patients, and changing their management

• Across three service settings: primary care, psychological therapies, and multidisciplinary mental health care

• Including PROMs measuring social functioning and quality of life as well as symptoms of depression and anxiety

• Looking at feedback of results after a period of treatment, rather than screening or assessment at diagnosis

• Primary outcomes: symptoms of depression or anxiety; secondary outcomes: social functioning, QoL and costs
Inclusion and exclusion criteria

• Individual patient randomisation, or cluster randomisation

• Adults (18+) with anxiety, depression, phobias, OCD, panic, PTSD, and adjustment reactions (DSM, ICD, or clinical)

• Excluded if ≥ 10% of participants had psychoses, substance use, learning disorders, dementia, or eating disorders

• Participants with or without co-morbid physical illnesses

• Excluding more complex interventions including case management, collaborative care, and active outreach
Records identified through database searching (n = 4825)

Additional records identified through other sources (n = 59)

Records after duplicates removed (n = 4258)

Abstract/full articles screened (n = 122)

(Database searching 94) (Additional sources 28)

99 excluded:
- 25 reviews/descriptive articles
- 22 PROMs not used for outcome monitoring
- 19 ineligible populations
- 14 non-randomised studies
- 13 complex quality improvement
- 3 unable to retrieve full references
- 3 ongoing studies

Studies included in qualitative synthesis (n = 17, 23 papers)

Studies included in quantitative synthesis (meta-analysis) (n = 12)
Overview of studies

- Seventeen studies involving 8787 participants were included: two in primary care, six in psychological therapy, and nine in multidisciplinary mental health care settings.

- Pooling of outcome data across studies was possible only for those using the composite Outcome Questionnaire (OQ-45) or Outcome Rating System (ORS) PROMs.

- Only two studies reported QoL, one reported social functioning, and none reported costs.

- Post-hoc subgroup analyses looked at reported differences for ‘on track’ (OT) and ‘not on track’ (NOT) participants.
### OQ-45 or ORS Feedback and Outcome

<table>
<thead>
<tr>
<th>Study or Subgroup</th>
<th>Feedback Mean</th>
<th>Feedback SD</th>
<th>Feedback Total</th>
<th>No feedback Mean</th>
<th>No feedback SD</th>
<th>No feedback Total</th>
<th>Weight</th>
<th>Std. Mean Difference IV, Random, 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amble 2014</td>
<td>75.5</td>
<td>28.6</td>
<td>144</td>
<td>84.6</td>
<td>25.1</td>
<td>115</td>
<td>8.4%</td>
<td>-0.33 [-0.58, -0.09]</td>
</tr>
<tr>
<td>De Jong 2012</td>
<td>67.43</td>
<td>25.78</td>
<td>206</td>
<td>67.53</td>
<td>24.16</td>
<td>207</td>
<td>11.5%</td>
<td>-0.00 [-0.20, 0.19]</td>
</tr>
<tr>
<td>De Jong 2014</td>
<td>54.18</td>
<td>23.99</td>
<td>171</td>
<td>51.76</td>
<td>26.84</td>
<td>71</td>
<td>7.1%</td>
<td>0.10 [-0.18, 0.37]</td>
</tr>
<tr>
<td>De Jong 2014</td>
<td>57.55</td>
<td>25.91</td>
<td>159</td>
<td>51.76</td>
<td>26.84</td>
<td>71</td>
<td>7.0%</td>
<td>0.22 [-0.06, 0.50]</td>
</tr>
<tr>
<td>Hansson 2013</td>
<td>88.49</td>
<td>17.82</td>
<td>136</td>
<td>88.97</td>
<td>18.53</td>
<td>126</td>
<td>8.6%</td>
<td>-0.03 [-0.27, 0.22]</td>
</tr>
<tr>
<td>Hawkins 2004</td>
<td>69.41</td>
<td>24.56</td>
<td>70</td>
<td>69.33</td>
<td>23.42</td>
<td>32</td>
<td>3.7%</td>
<td>0.00 [-0.41, 0.42]</td>
</tr>
<tr>
<td>Hawkins 2004</td>
<td>62.49</td>
<td>25.82</td>
<td>67</td>
<td>69.33</td>
<td>23.42</td>
<td>32</td>
<td>3.6%</td>
<td>-0.27 [-0.69, 0.15]</td>
</tr>
<tr>
<td>Lambert 2001</td>
<td>63.32</td>
<td>23.83</td>
<td>307</td>
<td>65.12</td>
<td>22.31</td>
<td>302</td>
<td>14.1%</td>
<td>-0.08 [-0.24, 0.08]</td>
</tr>
<tr>
<td>Murphy 2012</td>
<td>-24.39</td>
<td>7.13</td>
<td>59</td>
<td>-23.77</td>
<td>6.87</td>
<td>51</td>
<td>4.4%</td>
<td>-0.09 [-0.46, 0.29]</td>
</tr>
<tr>
<td>Probst 2013</td>
<td>71.32</td>
<td>25.66</td>
<td>107</td>
<td>72.95</td>
<td>25.27</td>
<td>96</td>
<td>7.2%</td>
<td>-0.06 [-0.34, 0.21]</td>
</tr>
<tr>
<td>Reese 2009a</td>
<td>-31.28</td>
<td>6.63</td>
<td>50</td>
<td>-29.53</td>
<td>7.26</td>
<td>24</td>
<td>2.8%</td>
<td>-0.25 [-0.74, 0.24]</td>
</tr>
<tr>
<td>Reese 2009b</td>
<td>-29.51</td>
<td>9.58</td>
<td>45</td>
<td>-24.33</td>
<td>7.51</td>
<td>29</td>
<td>2.9%</td>
<td>-0.58 [-1.06, -0.10]</td>
</tr>
<tr>
<td>Trudeau 2001</td>
<td>89.17</td>
<td>22.43</td>
<td>27</td>
<td>101.48</td>
<td>27.32</td>
<td>11</td>
<td>1.4%</td>
<td>-0.50 [-1.22, 0.21]</td>
</tr>
<tr>
<td>Whipple 2003</td>
<td>58.15</td>
<td>22.25</td>
<td>499</td>
<td>58.56</td>
<td>23.38</td>
<td>482</td>
<td>17.2%</td>
<td>-0.02 [-0.14, 0.11]</td>
</tr>
<tr>
<td><strong>Total (95% CI)</strong></td>
<td><strong>2047</strong></td>
<td><strong>1649</strong></td>
<td><strong>100.0%</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>-0.07 [-0.16, 0.01]</strong></td>
</tr>
</tbody>
</table>

Heterogeneity: Tau² = 0.01; Chi² = 18.46, df = 13 (P = 0.14); I² = 30%

Test for overall effect: Z = 1.63 (P = 0.10)
Discussion

- No evidence that routine outcome monitoring is beneficial in terms of improving overall outcomes for patients, or in terms of improving management

- Low quality evidence that routine outcome monitoring may improve outcomes for 'not on track' patients, and reduce length of treatment for 'on track' patients

- Monitoring alone is insufficient: practitioners need guidance on treatment changes which should follow

- More research of better quality is required, especially in primary care where most CMHDs are managed
Conclusions

• Overall, this review provides little support for policy recommendations in the UK and USA that people with CMHDs should be routinely monitored using PROMs.

• The available trial evidence, coming largely from the USA and Europe, and mostly using the compound OQ-45 or ORS outcome measures, has limited generalisability to the IAPT psychological therapy settings in the UK, where routine outcome monitoring of hundreds of thousands of people with CMHDs takes place every year using a range of single domain PROMs.

• [URL](http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD011119.pub2/full)

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