The cost-effectiveness of self care support interventions

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Self care support

- Huge burden of disease associated with chronic conditions
- Self care suggested as a possible means of reducing the burden and improving patient outcomes
- Numerous interventions but Chronic Disease Self Management Program (on which Expert Patient Programme (EPP) is based) is best known
- Rolled out across England and Wales
- 100,000 target by 2012
Background

- Evidence of cost-effectiveness of interventions to support self care is limited
- Often major study design flaws and/or analytical errors
- US studies
- Transferability
- Choice of outcome measures
RCT of EPP

- National evaluation of EPP based on CDSMP, designed to improve self-efficacy
- Economic evaluation with QALY as outcome measure
- 2 arm trial comparing EPP with waiting list control
- Any individual with (self reported) long term condition eligible
- No specific inclusion/exclusion criteria
## QALY results

<table>
<thead>
<tr>
<th></th>
<th>Mean QALY</th>
<th>Difference (95% CI)</th>
<th>Difference allowing for baseline characteristics* (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention group</td>
<td>0.276</td>
<td>0.0184</td>
<td>0.020</td>
</tr>
<tr>
<td>Control group</td>
<td>0.258</td>
<td>(-0.004 to 0.041)</td>
<td>(0.007 to 0.034)</td>
</tr>
</tbody>
</table>

* adjusted for age, gender, condition and baseline EQ-5D score
## Results: total costs

<table>
<thead>
<tr>
<th>Health care costs only</th>
<th>EPP group</th>
<th>Control group</th>
<th>95% CI around difference in mean cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>£1169</td>
<td>£1560</td>
<td>£389</td>
<td>(£38 to £741)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Cost including patient costs with intervention costed at £250 per patient*</th>
<th>£1912</th>
<th>£1939</th>
<th>£27</th>
</tr>
</thead>
<tbody>
<tr>
<td>95% CI around difference in mean cost</td>
<td></td>
<td></td>
<td>(-£368 to £422)</td>
</tr>
</tbody>
</table>

* the cost of the intervention is based on estimates from Department of Health calculated by diving total cost of programme by throughput
Conclusions of single trial analysis

- Based on this single trial based analysis, EPP looks cost-effective
- However, is this ALL relevant evidence?
- Concept of relevance
But, another RCT showed these results…

<table>
<thead>
<tr>
<th></th>
<th>National Evaluation of EPP (95% CI)</th>
<th>Griffiths evaluation of EPP (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incremental QALYs</td>
<td>0.020</td>
<td>-0.002</td>
</tr>
<tr>
<td>(intervention minus control, adjusted for baseline EQ-5D)</td>
<td>(0.007 to 0.034)</td>
<td>(-0.014 to 0.012)</td>
</tr>
<tr>
<td>Incremental cost</td>
<td>£27</td>
<td>£146</td>
</tr>
<tr>
<td>(intervention minus control)</td>
<td>(£422 to £368)</td>
<td>(£65 to £223)</td>
</tr>
</tbody>
</table>
CEACs using two trials
Other evidence

- Considerable amount of evidence from other studies re the effectiveness of CDSMP
- Quality of evidence
- Relevance of evidence
- Use of surrogate/intermediate outcome measure (self-efficacy)
- Aggregate data vs IPD
Graphical representation of data

- Treatment
- Costs and QALYs
- Self-efficacy

Arrows indicate relationships:
- C/QALYs → Treatment
- SE → Treatment
- C,Q → SE
- C/QALYs → Costs and QALYs
Conclusions

- Relevance is a key concept in synthesising evidence
- EPP might be cost-effective!!