

SBU Utvärderar: Multimodala och interdisciplinära behandlingar vid långvarig smärta, rapport nr 341 (2021)

## Appendix 6 Table of included health economic studies

Table 1. Economic evaluation comparing a combined rehabilitation program with a single behavioral rehabilitation program and a single physical rehabilitation program for patients with chronic low back pain.

| Author            | Smeets et al.   |
|-------------------|---|
| Year              | 2009  |
| Reference         |   |
|                   | [82]<br>Netherlands   |
| Country           |   |
| Study design      | RCT-based CEA. Time horizon: 62 weeks.  |
|                   |   |
| <b>.</b>          | Patients with non-specific low back pain for more than three months resulting in disability.  |
| Population        | Mean (SD) age 42.5 (9.5) years. 45% women.  |
| a                 |   |
| Setting           | Outpatient rehabilitation centres   |
|                   |   |
| Perspective       | Societal  |
| Intervention      | Group 1 (n=56): Combination treatment (CT) consisting of the three treatment modules:         |
|                   | active physical treatment (APT), graded activity training (GA) and problem solving training   |
|                   | (PST). Duration: 10 weeks. CT started with APT and PST, offered with same frequency and       |
|                   | duration as stated below. GA started in the third week with in total 19 sessions delivered.   |
|                   |   |
| vs                | VS  |
| control           | Group 2 (n=52): APT consisting of 30 min aerobic training on a bicycle and 75 min strength    |
|                   | and endurance training three times per week. Duration: 10 weeks.                              |
|                   |   |
|                   | Group 3 (n=52): Graded activity with problem solving training (GAP) consisting of GA and PST. |
| Incremental cost  | CT versus ATP:  |
|                   | <ul> <li>Incremental direct health care costs: 766 (95% CI 173, 1297)</li> </ul>              |
|                   | <ul> <li>Incremental direct non-health care costs: -56 (95% CI -671, 568)</li> </ul>          |
|                   | <ul> <li>Incremental indirect costs: – 1 137 EUR (95% CI -6 706, 4 511)</li> </ul>            |
|                   | <ul> <li>Incremental total costs: -407 EUR (95% CI -6 987, 5 900)</li> </ul>                  |
|                   |   |
|                   | <u>CT versus GAP</u>  |
|                   | <ul> <li>Incremental direct health care costs: 2 072 (95% CI 1 686, 2 441)</li> </ul>         |
|                   | <ul> <li>Incremental direct non-health care costs: -466 (95% CI -1 375, 293)</li> </ul>       |
|                   | <ul> <li>Incremental indirect costs: 3 051 EUR (95% CI -2 933, 8 862)</li> </ul>              |
|                   | <ul> <li>Incremental total costs: 4787 EUR (95% CI -984, 10 540)</li> </ul>                   |
|                   |   |
|                   | Costs reported in EUR year 2003   |
| Incremental       | <u>CT versus ATP:</u>   |
| effect            | <ul> <li>Incremental RDQ score: -1.23 (95% CI -3.01, 0.55)</li> </ul>                         |
|                   | <ul> <li>Incremental QALYs: -0.014 (95% CI 0.094, 0.066)</li> </ul>                           |
|                   |   |
|                   | <u>CT versus GAP:</u>   |
|                   | <ul> <li>Incremental RDQ score: -1.27 (95% CI -2.96, 0.42)</li> </ul>                         |
|                   | Incremental QALYs: -0.045 (95% CI -0.119, 0.029)  |
| ICER              | N/A since there was no significant difference in RDQ score or QALYs for patients who received |
|                   | CT compared with ATP or GAP.  |
| Study quality and | Moderate quality. Moderate/high transferability to Sweden                                     |
| transferability*  |   |
|                   | Comments:   |
|                   |   |

| SBL<br>3BL                      | 2 (3)<br>SBU Utvärderar: Multimodala och inter-<br>disciplinära behandlingar vid långvarig smärta,<br>rapport nr 341 (2021)  |
|---------------------------------|--|
| Further information<br>Comments | <ul> <li>The main trial results are reported in Smeets 2006 [29].</li> <li>The RCT contained a fourth group which was randomised to a waiting list but this group was not part of the health economic analysis.</li> <li>We chose not to report the ICERs presented in the publication as there was no significant difference in effects between the study groups. The reported ICERs were not accompanied by 95% CI and could be misleading.</li> <li>Indirect costs were estimated using the human capital approach.</li> <li>The 95% CI for the difference in QALYs that appears in the publication (reported above) appears to be incorrect as both values are positive while the estimate is negative.</li> </ul> |

\*Assessed using SBU's checklist for trial-based health economic studies.

Abbreviations: APT = active physical treatment; CEA = cost-effectiveness analysis; CT = combination treatment; GA = graded activity training; GAP = graded activity with problem solving training; PST = problem solving training; RCT = Randomized controlled trial; EUR = Euro; QALY = Quality adjusted life years; ICER = Incremental cost-effectiveness ratio; RDQ = Roland Disability Questionnaire.

Table 2. Economic evaluation comparing an integrated care programme with usual care for sick listed patients with chronic low back pain.

| Author           | Lambeek et al.  |
|------------------|---|
| Year             | 2010  |
| Reference        | [43]  |
| Country          | Netherlands   |
| Study design     | RCT-based within-trial CEA  |
| Population       | Adults aged 18-65 who had low back pain lasting more than 12 weeks, had paid work (paid employment or self-employed) for at least eight hours a week, and were on (partial) sick leave.   |
| Setting          | Workplace, outpatient specialist clinic and primary care  |
| Perspective      | Societal  |
| Intervention     | Integrated care consisting of a workplace intervention protocol and a graded activity protocol (n=66). The workplace protocol aimed to formulate a plan for adaptations at work to facilitate return to work. The graded activity protocol was a time contingent programme based on cognitive behavioural principles. |
| vs               | vs  |
| control          | Usual care given by occupational physician and general practitioner according the Dutch   |
|                  | guidelines for patients with low back pain (n=68)   |
| Incremental cost | Incremental direct costs: 217 GBP (95% CI -131, 662)  |
|                  | Incremental indirect costs: -5 527 (95% CI -10 160, -740)   |
|                  | Incremental total costs -5 310 GBP (95% CI -10 042, -391)   |
|                  |   |
|                  | Cost reported in GBP year 2007  |
| Incremental      | Difference in days until sustainable return to work: -68 (95 % CI -110, -26)  |
| effect           | Incremental QALY gained: 0.09 (95% CI 0.01, 0.16)   |
| ICER             | Incremental direct costs/day until sustainable return to work: -3 GBP. Distribution of  |
|                  | bootstrapped cost-effect pairs on the cost-effectiveness plane showed that 86% of   |



## Bilaga till rapport

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|  | simulations were situated in the northeast quadrant indicating that integrated care is more<br>effective but also more costly than usual care.<br>Incremental total costs/QALYs gained: -61,000 GBP. Integrated care dominates. Distribution<br>of bootstrapped cost-effect pairs on the cost-effectiveness plane showed that 98% of<br>simulations were situated in the southeast quadrant indicating that integrated care is more<br>effective and less costly than usual care. |
|--|---|
| Study quality and<br>transferability*<br>Further information<br>Comments | <ul> <li>High quality</li> <li>Moderate/high transferability to Sweden</li> <li>The main trial results are reported in Lambeek 2010 [43].</li> <li>Indirect costs were estimated using the human capital approach.</li> </ul>   |

\*Assessed using SBU's checklist for trial-based health economic studies.

Abbreviations: CEA = cost-effectiveness analysis; RCT = Randomized Controlled Trial; GBP = Great British Pound; QALY = Quality adjusted life years; ICER = Incremental cost-effectiveness ratio.