Bilaga 5 Granskade hälsoekonomiska studier

Internetförmedlad psykologisk behandling
Jämförelse med andra behandlingar vid psykiatriska syndrom
Internet-based psychological treatment compared to other interventions for common mental disorders
Rapport nr 337 (2021)

Appendix 5 Details of critically appraised health economic studies

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Table of details of critically appraised health economic studies

Author **Year** **Reference** **Country**	**Kraepelien et al** **2018** **[1]** **Sweden**
Study design **Population** **Setting** **Perspective**	RCT-based CEA. Follow-up at 3 months and 12 months after baseline. Patients aged 18–67 years with present depressive symptoms defined as scoring ≥10 on the Patient Health Questionnaire (PHQ-9). Primary care. Health care and societal perspectives.
Intervention **vs** **control**	ICBT for 12 weeks (n=317) vs TAU as administered by GP for 12 weeks (n=312)
Incremental cost	3-month follow-up, health care perspective: Mean total costs per patient were 811 EUR (SE 12) for ICBT and 513 EUR (SE 21) for TAU. 12-month follow-up, health care perspective: Mean total costs per patient were 2 254 EUR (1 753 EUR health care provider costs + 501 EUR intervention cost; SE not reported) for ICBT and 1 911 EUR (SE 128 EUR) for TAU. 12-month follow-up, societal perspective: Mean total costs per patient were 11 685 EUR (SE 587 EUR) for ICBT and 10 623 EUR (SE 810 EUR) for TAU. All above costs represent imputed values. Incremental costs were not reported but could be calculated from the above reported total costs. Costs were assessed in Swedish Krona (SEK) and converted to Euros using purchasing power parities and 2012 as reference year (1 SEK = Euro 0.0872962721).
Incremental effect	12-month follow-up: Mean QALYs were 0,6909 (SE 0,1037) for ICBT versus 0,6571 (SE 0,1085) for TAU. These results represent imputed values. CI or p-value for difference in QALYs not reported.
ICER	ICER for 12-month health care perspective: 10 166 EUR per QALY gained. ICER for 12-month societal perspective: 31 471 EUR per QALY gained. We choose not to report the ICER for the 3-month health care perspective as the authors report that the calculation was based on QALY-gain at 12 months.

	Results of the PSA indicated that ICBT has a probability of 90% of being cost-effective at the chosen WTP threshold of 21 536 EUR in the healthcare perspective and a probability of approximately 40% of being cost-effective at the same WTP threshold in the societal perspective.
Study quality with respect to economic aspects*	Low to moderate quality with respect to economic aspects Main results of the RCT are reported in Hallgren 2015 and 2016 [2, 3] The trial also included one group randomised to physical activity. This risk of bias of the trial was assessed as high.
Further information Comments	25% of EQ-5D questionnaires and 23% of TiC-P questionnaires (which were used to collect data on costs) were missing at post-treatment follow-up. 17% of EQ-5D questionnaires and 40% of some items in the costing questionnaires were missing at 1-year follow-up. Missing data were imputed with multiple imputation by chained equations, using probability mean matching. Authors provided supplementary data on complete cases for EQ 5D and t-test for difference in QALYs between ICBT and TAU at 12 months (t = 1.999; p = 0.046).
Author **Year** **Reference** **Country**	**Holst et al** **2018** **[4]** **Sweden**
Study design	CEA based on pragmatic RCT. Follow-up at 3 months and 12 months after baseline.
Population	Patients aged >=18 years with a probable diagnosis of mild to moderate depression
Setting	Primary care.
Perspective	Health care and societal perspectives.
Intervention	ICBT for 12 weeks (n=52)
vs control	vs TAU as typically provided by the primary care center for 12 weeks (n=38)
Incremental cost	12-month follow-up, health care perspective: Mean (SD) total costs per patient were 4 044 SEK (SD 1 853 SEK) for ICBT and 4 434 SEK (2 651 SEK) for TAU. 12-month follow-up, societal perspective: Mean total costs per patient were 47 679 SEK (77 641 SEK) for ICBT and 50 343 SEK (87 176 SEK) for TAU. The difference in costs was not statistically significant between groups receiving ICBT and TAU (p=0.73 for difference in costs in health care perspective and p=0.85 for difference in costs in societal perspective). Costs were reported in SEK year 2013.

Incremental effect	12-month follow-up: Mean (95% CI) QALYs were 0.74 (0.75-0.84) for ICBT versus 0.79 (0.70-0.78) for TAU. The difference in QALYs was not statistically significant between groups receiving ICBT and TAU.
ICER	We chose not to report the ICERs for the deterministic analysis as these were based on non-significant differences in costs and QALYs. The PSA indicated that ICERs were scattered throughout all four quadrants of the cost-effectiveness plane, indicating that no conclusion could be drawn regarding cost-effectiveness.
Study quality with respect to economic aspects*	Moderate quality with respect to economic aspects Main results of the RCT are reported in Kivi 2014 [5]. This risk of bias of the trial was assessed as high.
Further information Comments	The analysis was conducted for patients where both cost and outcome data were sufficient (40 ICBT vs 33 TaU patients).

CEA = Cost-effectiveness analysis; EUR = Euro; GP = General practitioner; ICBT = Internet-based cognitive behavioural therapy; ICER = Incremental cost-effectiveness ratio; PSA = Probabilistic sensitivity analysis; SE = Standard error; TAU = Treatment as usual; TiC-P = Trimbos and iMTA questionnaire on Costs associated with Psychiatric illness.

*Assessed using SBU's checklist for trial-based health economic studies [6].

References

1. Kraepelien M, Mattsson S, Hedman-Lagerlof E, Petersson IF, Forsell Y, Lindefors N, et al. Cost-effectiveness of internet-based cognitive-behavioural therapy and physical exercise for depression. BJPsych Open. 2018;4(4):265-73. Available from: https://doi.org/10.1192/bjo.2018.38.
2. Hallgren M, Helgadottir B, Herring MP, Zeebari Z, Lindefors N, Kaldo V, et al. Exercise and internet-based cognitive-behavioural therapy for depression: multicentre randomised controlled trial with 12-month follow-up. Br J Psychiatry. 2016;209(5):414-20. Available from: https://doi.org/10.1192/bjp.bp.115.177576.
3. Hallgren M, Kraepelien M, Ojehagen A, Lindefors N, Zeebari Z, Kaldo V, et al. Physical exercise and internet-based cognitive-behavioural therapy in the treatment of depression: randomised controlled trial. Br J Psychiatry. 2015;207(3):227-34. Available from: https://doi.org/10.1192/bjp.bp.114.160101.
4. Holst A, Bjorkelund C, Metsini A, Madsen JH, Hange D, Petersson EL, et al. Cost-effectiveness analysis of internet-mediated cognitive behavioural therapy for depression in the primary care setting: results based on a controlled trial. BMJ Open. 2018;8(6):e019716. Available from: https://doi.org/10.1136/bmjopen-2017-019716.
5. Kivi M, Eriksson MC, Hange D, Petersson EL, Vernmark K, Johansson B, et al. Internet-based therapy for mild to moderate depression in Swedish primary care: short term results from the PRIM-NET randomized controlled trial. Cogn Behav Ther. 2014;43(4):289-98. Available from: https://doi.org/10.1080/16506073.2014.921834.
6. SBU. Appendix 7 Checklist for assessing the quality of trialbased health economic studies. Stockholm: Statens beredning för medicinsk och social utvärdering (SBU); 2018. Available from: https://www.sbu.se/globalassets/ebm/metodbok/checklist_trialbased-economic-study.pdf.