## Economic evaluation of return-to-work interventions for mental disorderrelated sickness absence: two years follow-up of a randomized clinical trial <sup>1</sup>

by Anna Finnes, PhD,<sup>2</sup> Jeffrey S Hoch, PhD, Pia Enebrink, PhD, JoAnne Dahl, PhD, Ata Ghaderi, PhD, Anna Nager, PhD, Inna Feldman, PhD

- 1. Supplementary material
- 2. Correspondence to: Anna Finnes, Division of Psychology, Department of Clinical Neuroscience, Karolinska Institutet, Nobels väg 9, 171 77 Stockholm, Sweden. [E-mail: anna.finnes@ki.se]

## Supplement Content:

Table S1. Unit costs/visit, in Euro 2020

Table S2: Missing data (%) for the frequencies of health care visits

Supplementary Methods: Regression calculations for cost-effectiveness analyses

Figure S1-2. Bootstrapped results basecase analysis per intervention group 1 year and 2 years.

Figure S3-4. Bootstrapped results per intervention group for the subgroup analysis depression or anxiety disorders 1 year and 2 years.

Figure S5-6. Bootstrapped results per intervention group for the subgroup analysis stress-induced exhaustion disorder 1 year and 2 years.

Table S3. Mean differences in costs overall between treatment arms.

Figure S7. Cost-effectiveness acceptability curves for ACT, WDI, ACD+WDI compared with TAU over one- and two years follow-up for overall cost.

Figure S8. Cost-effectiveness acceptability curves for ACT, WDI, ACD+WDI compared with TAU over one- and two years follow-up for patients with depression or anxiety and with stress-induced exhaustion disorder for overall cost.

Table S1. Unit costs/visit, in Euro 2020

Professional	Costs
Medical doctor	389
Psychologist	275
Social worker	190
Physical therapist	137
Nurse	282

**Table S2:** Missing data (%) for the frequencies of health care visits to different professionals at all follow-up measurements

	Frequencies of health care visits to:				
	Medical doctor	Psychologist	Social worker	Physical therapist	Nurse
Post-treatment	20%	25%	22%	26%	22%
6-month FU	15%	10%	8%	9%	9%
12 -month FU	11%	5%	2%	4%	2%
24-month FU	17%	17%	17%	17%	17%

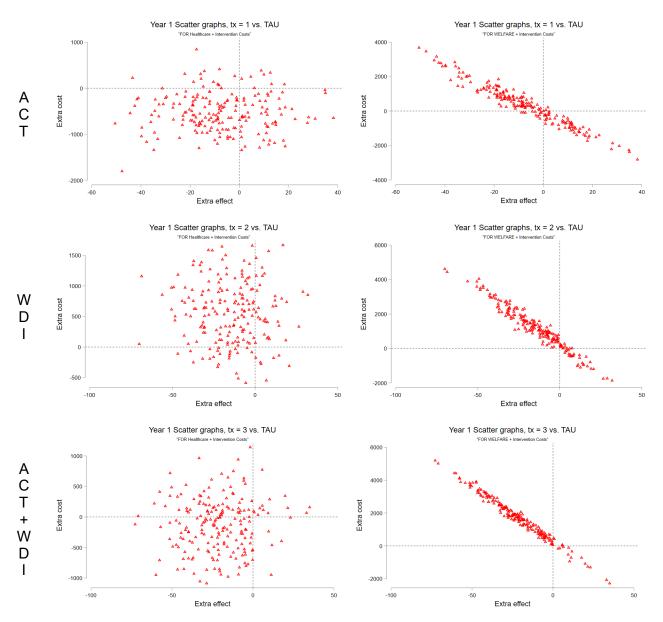
## Regression calculations for cost-effectiveness analyses

Regression calculations were adjusted for the following covariates as: age, sex, education level, birthplace, previous grade of SA absence and marital status. Denoting these covariates as X and the treatment options as ACT, WDI, and ACT&WDI, the regression analysis estimated the coefficients for equations [1] and [2]

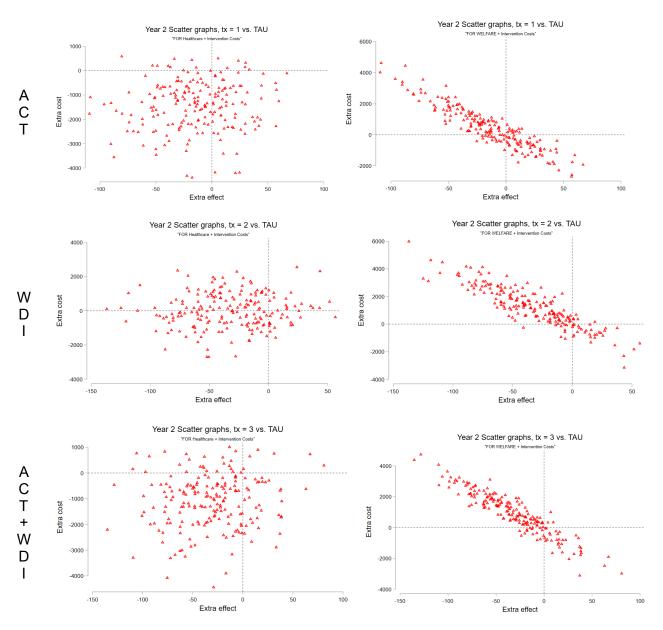
Cost = 
$$\alpha_0 + \alpha_{ACT} ACT + \alpha_{WDI} WDI + \alpha_{ACT\&WDI} ACT\&WDI + \alpha_X X$$
 [1]

NDSA = 
$$\beta_0 + \beta_{ACT} ACT + \beta_{WDI} WDI + \beta_{ACT\&WDI} ACT\&WDI + \beta_X X$$
 [2]

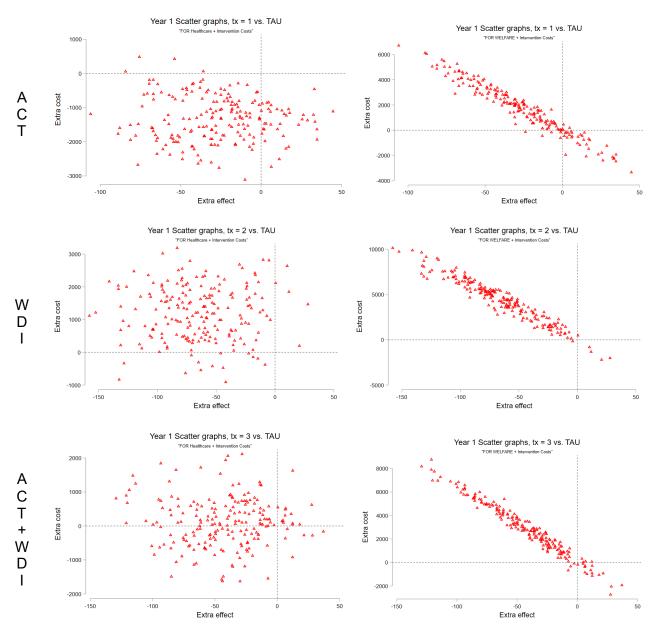
where the coefficient estimates of  $\alpha_t$  and  $\beta_t$  equal the extra cost ( $\Delta C$ ) and extra effect ( $\Delta E$ ) estimates comparing treatment t to TAU (for t = ACT, WDI, and ACT+WDI).



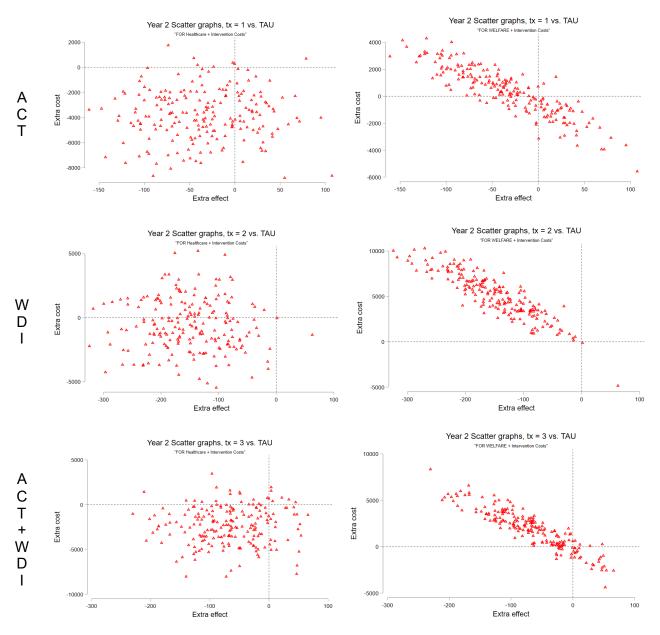
**Figure S1.** Cost-effectiveness planes for year 1 including all participants (n=264). The health perspective is presented to the right and the wellfare perspective to the left for each treatment arm compared to TAU.



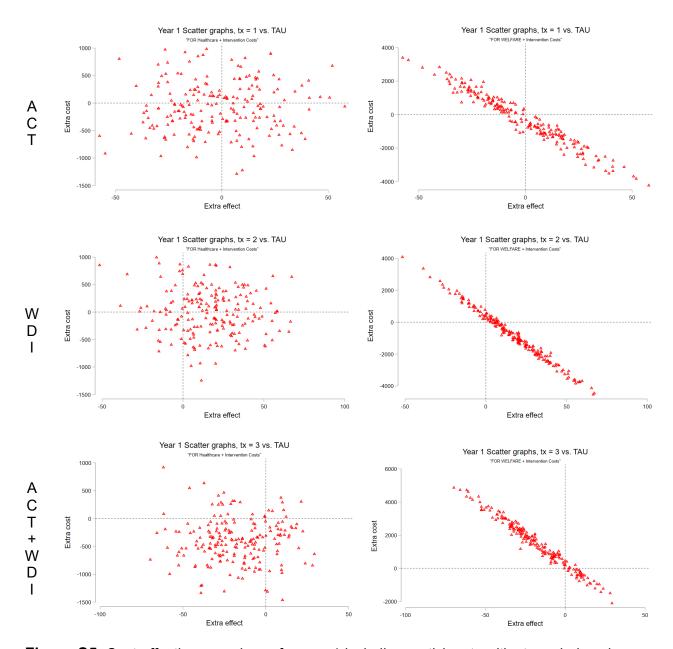
**Figure S2.** Cost-effectiveness planes for year 2 including all participants (n=264). The health perspective is presented to the right and the wellfare perspective to the left for each treatment arm compared to TAU.



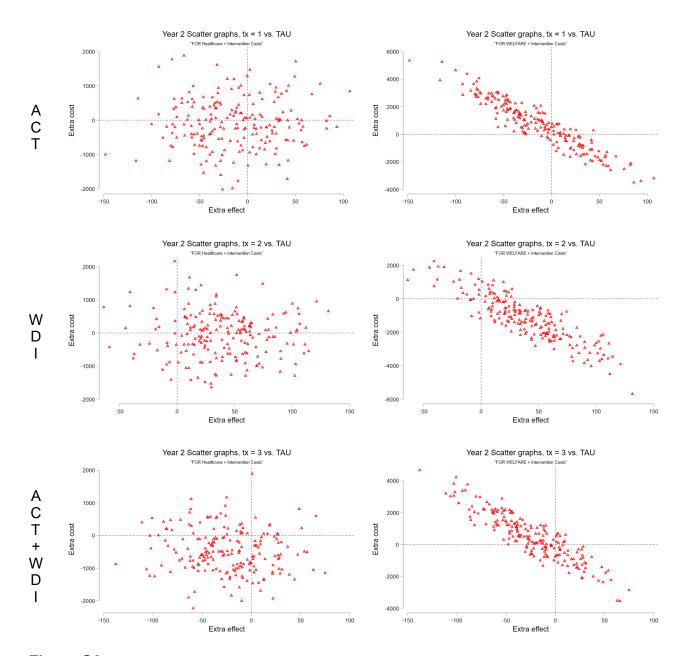
**Figure S3.** Cost-effectiveness planes for year 1 including participants with depression or anxiety disorders (n=107). The health perspective is presented to the right and the wellfare perspective to the left for each treatment arm compared to TAU.



**Figure S4.** Cost-effectiveness planes for year 2 including participants with depression or anxiety disorders (n=107). The health perspective is presented to the right and the wellfare perspective to the left for each treatment arm compared to TAU.



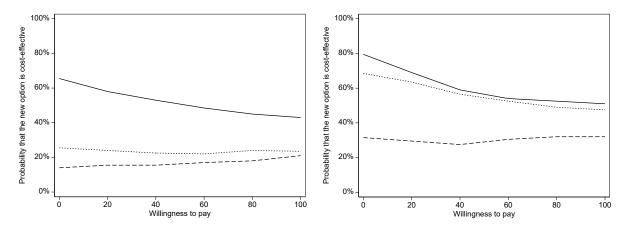
**Figure S5.** Cost-effectiveness planes for year 1 including participants with stress-induced exhaustion disorder (n=157). The health perspective is presented to the right and the wellfare perspective to the left for each treatment arm compared to TAU.



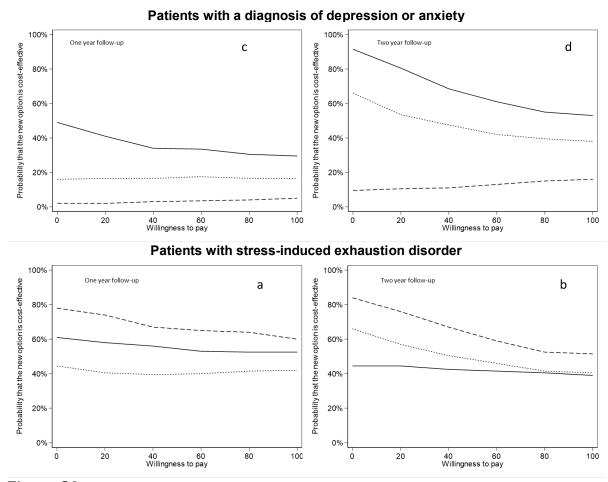
**Figure S6.** Cost-effectiveness planes for year 2 including participants with stress-induced exhaustion disorder (n=157). The health perspective is presented to the right and the wellfare perspective to the left for each treatment arm compared to TAU.

**Table S3**. Mean differences in costs overall (in €2020) between treatment arms.

-	ACT vs TAU	WDI vs TAU	ACT+WDI vs TAU			
Time horizon	Estimate (95% CI)	Estimate (95% CI)	Estimate (95% CI)			
		All participants, n=264				
Total cost 1	-423.04 (-2797.40-	1275.95 (-1370.74–	1112.67 (-1770.08–			
year	2081.58)	4202.75)	3463.33)			
Total cost 2		1706.776 (-2178.34–	1450.44 (-4053.96–			
year	44.34 (-4581.59–1773.43)	4137.29)	2644.72)			
Participants with depression or anxiety disorder, n=107						
Total cost 1	-372.58 (-3989.36–	4439.41 <sup>a</sup> (166.81–9789.97)	1961.72 (-2485.70–			
year	4080.86)		7796.48)			
Total cost 2	-624.61 (-8548.14–	6823.10 (-3286.88–	1,676.33 (-7174.76–			
year	1330.09)	9641.76)	4369.68)			
Participants with stress-induced exhaustion disorder, n= 157						
Total cost 1	-730.17 (-3893.42–	-1287.88 (-4387.09–	282.72 (-2317.98–3478.00)			
year	2069.29)	1904.95)				
Total cost 2	10.19 (-3218.56–4061.16)	-2371.09 (-4692.58–	1158.58 (-3850.64–			
year	•	1658.97)	2526.08)			



**Figure S7**. Cost-effectiveness acceptability curves for ACT, WDI, ACD+WDI compared with TAU over one- and two years follow-up. ACT – solid line, WDI - dashed line, ACT+WDI - dotted line.



**Figure S8**. Cost-effectiveness acceptability curves for ACT, WDI, ACD+WDI compared with TAU over one- and two years follow-up for patients with depression or anxiety (c, d) and with stress-induced exhaustion disorder (a, b). ACT – solid line, WDI - dashed line, ACT+WDI - dotted line.