

## Appendix 18d: Computerised cognitive behavioural therapy for panic disorder GRADE evidence profiles

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## CCBT versus waitlist control for panic disorder

Quality assessment							Summary of findings				Importance	
No. of studies	Design	Limitations	Inconsistency	Indirectness	Imprecision	Other considerations	No. of patients		Effect			Quality
							CCBT	Waitlist control	Relative (95% CI)	Absolute		
<b>Measure of general anxiety (Better indicated by lower values)</b>												
2	Randomised trials	No serious limitations	No serious inconsistency	No serious indirectness	No serious imprecision	None	51	50	-	SMD 1.29 lower (1.72 to 0.86 lower)	⊕⊕⊕⊕ HIGH	
<b>Measure of depression (Better indicated by lower values)</b>												
2	Randomised trials	No serious limitations	No serious inconsistency	No serious indirectness	No serious imprecision	None	51	50	-	SMD 0.84 lower (1.39 to 0.29 lower)	⊕⊕⊕⊕ HIGH	
<b>Measure of Quality of Life (psychological) (Better indicated by lower values)</b>												
2	Randomised trials	No serious limitations	No serious inconsistency	No serious indirectness	No serious imprecision	None	51	50	-	SMD 0.55 lower (0.95 to 0.15 lower)	⊕⊕⊕⊕ HIGH	
<b>Non-panic-free status (clinician and self-report) - Non-remission (1-month post-treatment no longer fulfils panic disorder diagnostic criteria)</b>												
2	Randomised trials	No serious limitations	Very serious <sup>1</sup>	No serious indirectness	Serious <sup>2</sup>	None	21/51 (41.2%)	49/51 (96.1%)	RR 0.44 (0.12 to 1.55)	538 fewer per 1000 (from 845 fewer to 528 more)	⊕○○○ VERY LOW	
							100%	560 fewer per 1000 (from 880 fewer to 550 more)				
<b>Discontinuation due to any reason</b>												
2	Randomised trials	No serious limitations	No serious inconsistency	No serious indirectness	Serious <sup>2</sup>	None	5/51 (9.8%)	3/50 (6%)	RR 1.48 (0.2 to 10.79)	29 more per 1000 (from 48 fewer to 587 more)	⊕⊕⊕○ MODERATE	
								5.8%		28 more per 1000 (from 46 fewer to 568 more)		

<sup>1</sup> High heterogeneity (>80%)

<sup>2</sup> 95% confidence interval including no effect

## Health economic profile

Internet Psykiatri versus waiting list							
Study & country	Limitations	Applicability	Other comments	Incremental cost (£) <sup>1</sup>	Incremental effect	ICER (£/effect) <sup>1</sup>	Uncertainty <sup>1</sup>
Guideline analysis (model 3) UK	Minor limitations <sup>2</sup>	Directly applicable <sup>3</sup>	• Time horizon: 1 year	£115.62	0.052	£2,216/QALY	Probability of Internet Psykiatri being cost effective at £20,000/QALY: 85.3%

1. Costs expressed in 2009 UK pounds

2. Limited evidence base (2 RCTs); intervention currently not available in the UK

3. Analysis conducted to assist guideline development; NHS and personal social services perspective; QALYs estimated based on EQ-5D

## CCBT versus information control for panic disorder

Quality assessment							Summary of findings					Importance
No. of studies	Design	Limitations	Inconsistency	Indirectness	Imprecision	Other considerations	No. of patients		Effect		Quality	
							CCBT	information control	Relative (95% CI)	Absolute		
<b>Measure of general anxiety (Better indicated by lower values)</b>												
2	Randomised trials	No serious limitations	No serious inconsistency	No serious indirectness	Serious <sup>1</sup>	None	31	27	-	SMD 0.1 lower (0.77 lower to 0.58 higher)	⊕⊕⊕○ MODERATE	
<b>Measure of panic severity (Better indicated by lower values)</b>												
2	Randomised trials	No serious limitations	Serious <sup>2</sup>	No serious indirectness	No serious imprecision	None	31	27	-	SMD 1.9 lower (3.04 to 0.76 lower)	⊕⊕⊕○ MODERATE	
<b>Measure of depression (Better indicated by lower values)</b>												
2	Randomised trials	No serious limitations	No serious inconsistency	No serious indirectness	No serious imprecision	None	31	27	-	SMD 0.57 lower (1.1 to 0.04 lower)	⊕⊕⊕⊕ HIGH	
<b>Measure of Quality of life (Psychological) (Better indicated by lower values)</b>												
1	Randomised trials	No serious limitations	No serious inconsistency	No serious indirectness	Serious <sup>1</sup>	None	12	9	-	SMD 0.25 lower (1.12 lower to 0.61 higher)	⊕⊕⊕○ MODERATE	
<b>Non-panic-free status (clinician and self-report)</b>												
2	Randomised trials	No serious limitations	No serious inconsistency	No serious indirectness	No serious imprecision	None	9/31 (29%)	25/27 (92.6%)	RR 0.32 (0.18 to 0.56)	630 fewer per 1000 (from 407 fewer to 759 fewer)	⊕⊕⊕⊕ HIGH	
						91.7%		624 fewer per 1000 (from 403 fewer to 752 fewer)				

Discontinuation due to any reason												
2	Randomised trials	No serious limitations	No serious inconsistency	No serious indirectness	Serious <sup>1</sup>	None		3/31 (9.7%)	7/27 (25.9%)	RR 0.42 (0.11 to 1.63)	150 fewer per 1000 (from 231 fewer to 163 more)	⊕⊕⊕O MODERATE
								25%			145 fewer per 1000 (from 222 fewer to 157 more)	

<sup>1</sup> 95% confidence interval including no effect

<sup>2</sup> Moderate heterogeneity (50-80%)

## Health economic profile

Panic online versus information control							
Study & country	Limitations	Applicability	Other comments	Incremental cost (£) <sup>1</sup>	Incremental effect	ICER (£/effect) <sup>1</sup>	Uncertainty <sup>1</sup>
Klein <i>et al.</i> , 2006 Australia	Potentially serious limitations <sup>2</sup>	Partially applicable <sup>3</sup>	<ul style="list-style-type: none"> <li>Time horizon: 6 weeks</li> <li>Cost-consequence analysis</li> </ul>	£141	See GRADE clinical profile above	Non-applicable	No statistical analysis of costs
Guideline analysis (model 1) UK	Minor limitations <sup>4</sup>	Directly applicable <sup>5</sup>	<ul style="list-style-type: none"> <li>Time horizon: 1 year</li> </ul>	£354.96	0.046	£7,599/QALY	Probability of cost effectiveness at £20,000/QALY: 92%

1. Costs converted and uplifted to 2009 UK pounds, using purchasing power parity (PPP) exchange rates (<http://www.oecd.org/std/ppp>) and the UK HCHS inflation index; assuming study cost year 2004

2. Short time horizon; intervention costs only considered; various panic, anxiety and cognition outcomes measured (cost-consequence analysis)

3. Australian study; narrow perspective (intervention costs only considered); local prices used; no QALYs estimated but outcome measures considered relevant in guideline systematic review of clinical evidence

4. Limited evidence base (2 RCTs); intervention currently not available in the UK

5. Analysis conducted to assist guideline development; NHS and personal social services perspective; QALYs estimated based on EQ-5D

## CCBT versus any control (waitlist or information control) for panic disorder

Quality assessment							Summary of findings				Quality	Importance
No. of studies	Design	Limitations	Inconsistency	Indirectness	Imprecision	Other considerations	No. of patients		Effect			
							CCBT	Any control (waitlist or information control)	Relative (95% CI)	Absolute		
<b>Measure of general anxiety (Better indicated by lower values)</b>												
4	Randomised trials	No serious limitations	Serious <sup>1</sup>	Serious <sup>2</sup>	No serious imprecision	None	82	77	-	SMD 0.7 lower (1.41 lower to 0.01 higher)	⊕⊕⊕⊕ LOW	
<b>Measure of panic severity (Better indicated by lower values)</b>												
4	Randomised trials	No serious limitations	No serious inconsistency	Serious <sup>2</sup>	No serious imprecision	None	82	77	-	SMD 1.78 lower (2.26 to 1.31 lower)	⊕⊕⊕⊕ MODERATE	
<b>Measure of depression (Better indicated by lower values)</b>												
4	Randomised trials	No serious limitations	No serious inconsistency	Serious <sup>2</sup>	No serious imprecision	None	82	77	-	SMD 0.72 lower (1.05 to 0.4 lower)	⊕⊕⊕⊕ MODERATE	
<b>Measure of Quality of Life (Psychological) (Better indicated by lower values)</b>												
3	Randomised trials	No serious limitations	No serious inconsistency	No serious indirectness	No serious imprecision	None	63	59	-	SMD 0.5 lower (0.86 to 0.14 lower)	⊕⊕⊕⊕ HIGH	
<b>Non-Panic-free status (clinician and self-report)</b>												
4	Randomised trials	No serious limitations	Serious <sup>1</sup>	Serious <sup>2</sup>	No serious imprecision	None	30/82 (36.6%)	74/78 (94.9%)	RR 0.38 (0.19 to 0.78)	588 fewer per 1000 (from 209 fewer to 768 fewer)	⊕⊕⊕⊕ LOW	
								94.6%		587 fewer per 1000 (from 208 fewer to 766 fewer)		
<b>Discontinuation due to any reason</b>												
4	Randomised trials	No serious limitations	No serious inconsistency	Serious <sup>2</sup>	Serious <sup>3</sup>	None	8/82 (9.8%)	10/77 (13%)	RR 0.72 (0.22 to 2.4)	36 fewer per 1000 (from 101 fewer to 182 more)	⊕⊕⊕⊕ LOW	
								14.4%		40 fewer per 1000 (from 112 fewer to 202 more)		

<sup>1</sup> Moderate heterogeneity (50-80%)

<sup>2</sup> Different comparator

<sup>3</sup> 95% confidence interval including no effect

## CCBT versus face-to-face CBT for panic disorder

Quality assessment							Summary of findings					Importance
No. of studies	Design	Limitations	Inconsistency	Indirectness	Imprecision	Other considerations	No. of patients		Effect		Quality	
							CCBT	Face-to-face CBT	Relative (95% CI)	Absolute		
<b>Measure of general anxiety (Better indicated by lower values)</b>												
2	Randomised trials	No serious limitations	Serious <sup>1</sup>	No serious indirectness	Serious <sup>2</sup>	None	67	62	-	SMD 0.11 higher (0.41 lower to 0.62 higher)	⊕⊕⊕ LOW	
<b>Measure of depression (Better indicated by lower values)</b>												
2	Randomised trials	No serious limitations	No serious inconsistency	No serious indirectness	Serious <sup>2</sup>	None	70	63	-	SMD 0.13 higher (0.22 lower to 0.47 higher)	⊕⊕⊕ MODERATE	
<b>Measure of Quality of Life - QOL (Psychological) (Better indicated by lower values)</b>												
2	Randomised trials	No serious limitations	No serious inconsistency	No serious indirectness	Serious <sup>2</sup>	None	65	62	-	SMD 0.09 higher (0.26 lower to 0.44 higher)	⊕⊕⊕ MODERATE	
<b>Panic-free-status (clinician and self-report)</b>												
2	Randomised trials	No serious limitations	No serious inconsistency	No serious indirectness	Serious <sup>2</sup>	None	35/71 (49.3%)	33/64 (51.6%) 47.9%	RR 0.95 (0.61 to 1.46)	26 fewer per 1000 (from 201 fewer to 237 more) 24 fewer per 1000 (from 187 fewer to 220 more)	⊕⊕⊕ MODERATE	
<b>Discontinuation due to any reason</b>												
2	Randomised trials	No serious limitations	No serious inconsistency	No serious indirectness	Serious <sup>2</sup>	None	8/71 (11.3%)	5/64 (7.8%) 8.8%	RR 1.41 (0.48 to 4.2)	32 more per 1000 (from 41 fewer to 250 more) 36 more per 1000 (from 46 fewer to 282 more)	⊕⊕⊕ MODERATE	

<sup>1</sup> Moderate heterogeneity (50-80%)

<sup>2</sup> 95% confidence interval including no effect

## Health economic profile

Study & country	Limitations	Applicability	Other comments	Incremental cost (£) <sup>1</sup>	Incremental effect	ICER (£/effect) <sup>1</sup>	Uncertainty <sup>1</sup>
<b>Panic Online versus face-to-face CBT</b>							
Guideline analysis (model 2) UK	Minor limitations <sup>2</sup>	Directly applicable <sup>3</sup>	• Time horizon: 1 year	-£303.00	-0.023	£126,849/QALY	Probability of Panic Online being cost effective at £20,000/QALY: 71%
<b>Internet Psykiatri versus face-to-face CBT</b>							
Guideline analysis (model 4) UK	Minor limitations <sup>2</sup>	Directly applicable <sup>3</sup>	• Time horizon: 1 year	-£433.50	0.012	CCBT dominant	Probability of Internet Psykiatri being cost effective at £20,000/QALY: 95%

1. Costs uplifted to 2009 UK pounds using the UK HCHS inflation index.

2. Limited evidence base (1 RCT); intervention currently not available in the UK

3. Analysis conducted to assist guideline development; NHS and personal social services perspective; QALYs estimated based on EQ-5D

## CCBT versus bibliotherapy for panic disorder

### Health economic profile

<b>Panic Online versus therapist-assisted self-administered CBT</b>							
Study & country	Limitations	Applicability	Other comments	Incremental cost (£) <sup>1</sup>	Incremental effect	ICER (£/effect) <sup>1</sup>	Uncertainty
Klein <i>et al.</i> , 2006 Australia	Potentially serious limitations <sup>2</sup>	Partially applicable <sup>3</sup>	• Time horizon: 6 weeks • Cost-consequence analysis	-£14	See GRADE clinical profile above	Non-applicable	No significant difference in costs

1. Costs converted and uplifted to 2009 UK pounds, using purchasing power parity (PPP) exchange rates (<http://www.oecd.org/std/ppp>) and the UK HCHS inflation index; assuming study cost year 2004.

2. Short time horizon; intervention costs only considered; various panic, anxiety and cognition outcomes measured (cost-consequence analysis)

3. Australian study; narrow perspective (intervention costs only considered); local prices used; no QALYs estimated but outcome measures considered relevant in guideline systematic review of clinical evidence