

**Economic evidence tables for review question: For adults with a new episode of less severe depression or more severe depression, what are the relative benefits and harms of psychological, psychosocial, pharmacological and physical interventions alone or in combination?**

**Table 37. Economic evidence table for individual problem solving versus treatment as usual**

Study country and type	Intervention and comparator	Study population, design and data sources	Costs and outcomes (descriptions and values)	Results	Comments
Kendrick 2005/2006a UK Cost-utility analysis	Interventions: Problem-solving treatment provided by nurses Generic community mental health (MH) nurse care Usual GP care	Adults with a new episode of anxiety, depression or reaction to life difficulties with duration of symptoms 4 weeks to 6 months; and a General Health Questionnaire 12-item version (GHQ-12) $\geq 3$ . Exclusion criteria: current psychological treatment or contact with psychiatric services; severe mental disorder or substance misuse; dementia; active suicidal ideas Pragmatic RCT (N=247) (Kendrick 2005/2006a) Source of efficacy & resource use data: RCT, analysis based on n=184 with clinical data available; cost data available for n=159 Source of unit costs: national sources	Costs: intervention, training & supervision, medication, staff time (GP, practice nurse, counsellor, social worker, psychiatrist, psychologist), outpatient visit, A&E, inpatient care, other hospital contacts For societal perspective: out of pocket expenses and productivity losses Mean total NHS cost per person (SD): Problem solving: £608 (£501) MH nurse care: £569 (£350) GP care: £283 (£300) Adjusted differences vs GP care (95% CI): Problem solving: £325 (£204 to £484) MH nurse care: £286 (£174 to £411) Outcome measure: QALY based on EQ-5D ratings (UK tariff) Mean QALYs gained per person (SD): Problem solving: 0.39 (0.09) MH nurse care: 0.40 (0.07) GP care: 0.40 (0.07) Adjusted differences in QALY vs GP care (95% CI): Problem solving: -0.02 (-0.05 to 0.012) MH nurse care: 0 (-0.03 to 0.03)	NHS perspective: usual GP care dominant	Perspective: NHS (and societal) Currency: GBP£ Cost year: 2003 Time horizon: 26 weeks Discounting: NA Applicability: directly applicable Quality: minor limitations

**Table 38. Economic evidence table for self-help: computerised cognitive behavioural therapy (CBT) versus treatment as usual**

Study country and type	Intervention and comparator	Study population, design and data sources	Costs and outcomes (descriptions and values)	Results	Comments
Kaltenthaler 2006 UK Cost-utility analysis	Interventions: Computerised CBT – 3 packages examined: Beating the Blues (cCBT1) Cope (cCBT2) Overcoming Depression (cCBT3) Treatment as usual, defined as GP visits, medication and possible referral to a specialist (TAU)	Adults with depression treated in a primary care setting Decision-analytic modelling Source of efficacy data: analysis of RCT individual-level data for cCBT1 and cCBT2; published RCT data for cCBT3; and further assumptions Source of resource use data: manufacturer submissions, published data and other assumptions Source of unit costs: national sources	Costs: intervention (licence fees, computer hardware, screening of patients for suitability, clinical support, capital overheads, training), healthcare costs according to severity of depression (including medication, primary, inpatient and outpatient care) Mean total cost per person: cCBT1: £584 cCBT2: £630 cCBT3: £501 TAU: £437  Outcome measure: QALY estimated based on EQ-5D (UK tariff)  Mean QALYs per person cCBT1: 1.10 cCBT2: 1.05 cCBT3: 1.03 TAU: 1.02	ICER vs TAU: cCBT1: £1,801/QALY cCBT2: £7,139/QALY cCBT3: £5,391/QALY Probability of each intervention being cost-effective vs TAU at WTP £30,000/QALY: cCBT1: 0.87 cCBT2: 0.63 cCBT3: 0.54	Perspective: NHS Currency: GBP£ Cost year: likely 2003 Time horizon: 18 months Discounting: 3.5% annually Applicability: directly applicable Quality: potentially serious limitations

**Table 39. Economic evidence tables for SSRIs (sertraline) versus placebo**

Study country and type	Intervention and comparator	Study population, design and data sources	Costs and outcomes (descriptions and values)	Results	Comments
Hollingworth 2020 UK	Interventions: Sertraline Placebo	Adults aged 18-74 years presenting to primary care with depression or low mood during the past 2 years who had	Costs: sertraline, primary care consultations and phone calls (GP, nurse), medication, inpatient and outpatient care, accident and emergency, community care, home visits, other community care	Imputed incremental net monetary benefit (95% CI) at WTP £20,000 /QALY: whole sample: £122 (£18 to £226)	Perspective: NHS & personal social services Currency: GBP£

Study country and type	Intervention and comparator	Study population, design and data sources	Costs and outcomes (descriptions and values)	Results	Comments
Cost-utility analysis		not received antidepressant or anti-anxiety medication in the previous 8 weeks. Pragmatic RCT (N=655) (Lewis 2019) Source of efficacy & resource use data: RCT, analysis based on data imputation. n=505 with utility (EQ-5D) data available; cost data available for n=381 Source of unit costs: national sources	Mean imputed total cost /person (SD): Sertraline: £154 (£19) Placebo: £177 (£26) Difference: -£22 (-£87 to £42) Sub-group with mild depression: Difference: -£19 (-£154 to £116) Sub-group with moderate depression: Difference: £4 (-£145 to £152) Sub-group with severe depression: Difference: -£41 (-£109 to £27)  Outcome measure: QALY estimated based on EQ-5D (UK tariff) Mean imputed QALYs / person (SD): Sertraline: 0.182 (0.002) Placebo: 0.177 (0.002) Difference: 0.005 (-0.003 to 0.012) Sub-group with mild depression: Difference: 0.004 (-0.004 to 0.012) Sub-group with moderate depression: Difference: 0.007 (0 to 0.014) Sub-group with severe depression: Difference: 0.005 (-0.002 to 0.011)	Sub-group with mild depression: £102 (-£114 to £317)  Sub-group with moderate depression: £135 (-£69 to £339)  Sub-group with severe depression: £131 (-£18 to £281)  Probability of sertraline being cost-effective at WTP £20,000 /QALY: >95% in whole sample; >70% in each sub-group	Cost year: 2018 Time horizon: 12 weeks Discounting: NA Applicability: directly applicable Quality: minor limitations

Table 40. Economic evidence tables for SSRIs added to treatment as usual versus treatment as usual alone

Study country and type	Intervention and comparator	Study population, design and data sources	Costs and outcomes (descriptions and values)	Results	Comments
Kendrick 2009 UK	Interventions: SSRIs (fluoxetine,	Adults with depressive symptoms for ≥ 8 weeks, who had received no	Costs: medication, primary care (face-to-face GP consultations, GP telephone contacts, practice nurse contacts), secondary care (inpatient,	At 12 weeks SSRI & GP dominates GP alone	Perspective: health and social care

Study country and type	Intervention and comparator	Study population, design and data sources	Costs and outcomes (descriptions and values)	Results	Comments
Cost effectiveness and cost-utility analysis	fluvoxamine, sertraline, paroxetine, citalopram or escitalopram) plus GP supportive care GP supportive care alone, comprising consultations at 2, 4, 8 and 12 weeks after the baseline assessment	antidepressant treatment within the previous 12 months, were not in receipt of counselling or psychological therapies at baseline, had a baseline HAMD17 score 12-19 and at least one symptom on the Bradford Somatic Inventory (BSI). Exclusion criteria: significant substance misuse and an Alcohol Use Disorders Identification Test (AUDIT) score $\geq$ 12 RCT (Kendrick2009, N=220) Source of efficacy & resource use data: RCT (N=220; 12-week completers n=196; 6-month followed-up n=160) Source of unit costs: national sources	outpatient, day patient, accident and emergency), community health services (health visitors, district nurses, counselling or psychological therapists), social care services (social workers, housing workers) Mean (SD) total cost per person: At 12 weeks: SSRI & GP: £341 (£454); GP alone: £388 (£932) Difference adjusted for baseline: -£28 (95%CI -£656 to £117) At 26 weeks: SSRI & GP: £759 (£1730); GP alone: £629 (£1092) Difference adjusted for baseline: £153 (95%CI -£500 to £304) Outcome measures: HAMD17 score; QALY based on SF-36 ratings (UK tariff) Mean (SD) HAMD17 score per person: At 12 weeks SSRI & GP: 8.73 (5.20); GP alone: 11.22 (5.78) At 26 weeks SSRI & GP: 7.92 (5.67); GP alone: 9.73 (5.57) Mean QALYs gained per person: From baseline to 12 weeks SSRI & GP 0.159; GP alone 0.152 Difference adjusting for baseline 0.005 From baseline to 26 weeks	At zero WTP per unit of reduction on HAMD17, probability of SSRI & GP being cost-effective was 54.9% At a WTP of £20,000–£30,000/QALY, probability of SSRI & GP being cost-effective was 80-85%. At 26 weeks ICER of SSRI & GP vs. GP alone £90/unit of improvement on HAMD17 or £14,854/QALY SSRI & GP has a greater than 0.50 probability of being cost-effective when the WTP exceeds £80 per unit reduction on HAMD17 At a WTP at £20,000–£30,000/QALY, probability of SSRI & GP being cost-effective was 0.65-0.75	Currency: UK£ Cost year: 2007 Time horizon: 12 and 26 weeks Discounting: NA Applicability: directly applicable Quality: minor limitations

Study country and type	Intervention and comparator	Study population, design and data sources	Costs and outcomes (descriptions and values)	Results	Comments
			SSRI & GP 0.331; GP alone 0.318 Difference adjusted for baseline 0.010		

**Table 41. Economic evidence table for SSRIs versus TCAs: SSRIs versus TCAs versus lofepramine**

Study country and type	Intervention and comparator	Study population, design and data sources	Costs and outcomes (descriptions and values)	Results	Comments
Peveler 2005 / Kendrick 2006b UK Cost effectiveness and cost-utility analysis	Interventions: TCAs (amitriptyline, dothiepin or imipramine) SSRIs (fluoxetine, sertraline or paroxetine) Lofepramine (LOF) Treatment lasted 6 months after remission or for at least 12 months if participant had experienced $\geq 2$ depressive episodes within the past 5 years.	Adults with a new episode of depression willing to receive antidepressant treatment in primary care, including those with comorbid physical or mental illness. Exclusion criteria: already taking antidepressants, pregnant, breast-feeding, terminal illness Open-label RCT, with partial preference design (following randomisation, treatment could be prescribed from a different class to the one allocated at random, if participants or their doctor preferred an alternative). (Peveler2005; N=327; entered preference group n=92; followed-up at 12 months n=171) Source of efficacy data: RCT (n=264 for depression-free weeks, n=262 for QALYs) Source of resource use data: RCT (n=324; sub-analysis included for those who provided	Costs: GP time (surgery contact, by telephone, home visit), other staff time (practice nurse, district nurse, CPN, counsellor, psychiatrist), day centre, non-psychiatric hospital clinic, A&E, psychiatric and non-psychiatric in-patient stay Mean total cost per person (95%CI): TCAs £762 (£553 to £1059) SSRIs £875 (£675 to £1355) LOF £867 (£634 to £1521) (p=0.09) Outcome measures: number of depression-free weeks (DFW, defined as a Hospital Anxiety and Depression Scale - Depression subscale (HADS-D) <8) and QALYs based on EQ-5D ratings (UK tariff) Number of depression-free weeks per person (95%CI): TCAs 25.3 (21.3 to 29.0) SSRIs 28.3 (24.3 to 32.2) LOF 24.6 (20.6 to 28.9) p=0.327 Mean QALYs per person, adjusted for baseline (95%CI): TCAs 0.548 (0.481 to 0.606)	ICERs SSRI vs. TCAs £59/DFW TCAs vs. LOF £183/DFW (TCAs extendedly dominated) SSRI vs. LOF £32/DFW SSRIs vs. LOF £5,686/QALY LOF vs. TCAs £23,250/QALY (LOF extendedly dominated) SSRIs vs. TCAs £2,692/QALY Probability of SSRIs being cost-effective approximately 0.6 at WTP of £20,000/QALY	Perspective: NHS Currency: UK£ Cost year: 2002 Time horizon: 12 months Discounting: NA Applicability: directly applicable Quality: minor limitations

Study country and type	Intervention and comparator	Study population, design and data sources	Costs and outcomes (descriptions and values)	Results	Comments
		efficacy data, and used in estimation of ICERs/CEACs) Source of unit costs: national sources	SSRIs 0.586 (0.523 to 0.641) LOF 0.552 (0.493 to 0.612) p=562		

**Table 42. Economic evidence table for exercise plus treatment as usual versus treatment as usual alone**

Study country and type	Intervention and comparator	Study population, design and data sources	Costs and outcomes (descriptions and values)	Results	Comments
Chalder 2012 UK Cost-utility analysis	Interventions: Physical activity intervention delivered by a physical activity facilitator plus GP treatment as usual GP treatment as usual (TAU), which may include antidepressant medication, counselling or referral to secondary mental health services	Adults 18-69 years of age, with a recent first or new episode of mild/moderate depression (BDI score $\geq 14$ ), who were not taking antidepressants at the time of assessment or had been prescribed antidepressants within 4 weeks of assessment but had had an antidepressant-free period of 4 weeks prior to that  Pragmatic, multicentre RCT (N=361, excluded from clinical analysis due to high attrition rates)  Source of efficacy and resource use data: RCT (at 12 months EQ-5D data n=195; complete resource use data n=156; multiple imputation used in sensitivity analysis)	Costs: intervention (physical activity facilitator's time), primary care professionals' time (GP, practice nurse, phlebotomist, health visitor, district nurse, midwife, nurse practitioner, mental health worker, counsellor, community psychiatric nurse, physiotherapist), paramedic, A&E, outpatient care, walk-in centre, NHS Direct out-of-hours care, medication, productivity losses Mean total service cost per person: Physical activity £ 646; TAU £350 Difference: £296 (95%CI £202 to £390) Primary outcome measure: QALYs estimated using EQ-5D ratings (UK tariff) QALYs per person: Physical activity: 0.809; TAU 0.795 Difference 0.014 (95%CI -0.033 to 0.061)	Under NHS & PSS perspective: Using completers' data: ICER of physical activity vs. TAU: £20,834/QALY Probability of physical activity being cost-effective at £20,000 and £30,000/QALY: 0.49 and 0.57, respectively Using imputed data: ICER of physical activity vs. TAU £19,394/QALY Probability of physical activity being cost-effective at £20,000 and £30,000/QALY: 0.50 and 0.60, respectively	Perspective: NHS & PSS (and societal) Currency: GBP£ Cost year: 2009 Time horizon: 12 months Discounting: NA Applicability: directly applicable Quality: potentially serious limitations

<b>Study country and type</b>	<b>Intervention and comparator</b>	<b>Study population, design and data sources</b>	<b>Costs and outcomes (descriptions and values)</b>	<b>Results</b>	<b>Comments</b>
		Source of unit costs: national sources			