

Evidence tables for economic studies

Study, year and country	Intervention details	Study population Setting Study design – data source	Study Type	Costs: description and values Outcomes: description and values	Results: Cost-effectiveness	Comments Internal validity (Yes/No/NA) Industry support
O'Connor 2005 U.S.A.	<u>Comparators:</u> Sertraline Placebo	Patients who were hospitalised for acute coronary syndromes and who met the APA's DSMIV criteria for major depressive disorder (MDD). Setting: secondary care and a hospital Source of clinical effectiveness data: SADHART RCT, n= 369, Glassman et al. 2002 Source of resource use estimates: prospectively on the same sample of patients as that used in the clinical trial. Source of unit costs: Medicare fee schedule. Sertraline costs came from average wholesale prices, assuming perfect compliance.	Cost-effectiveness analysis -cost-minimisation analysis was carried out (no statistically significant differences between the groups were found).	<u>Costs:</u> Only costs strictly related to hospitalisations, emergency room visits, cardiac procedures and drug use. Excluding medication costs, the mean cost per patient was \$2,733 (+/- 6,764) in the sertraline group and \$3,326 (+/- 7,195) in the control group, (p=0.32). After including the cost of sertraline, the costs in the sertraline group increased to \$3,093 <u>Outcomes:</u> No summary benefit measure was used. The outcome measure used in the analysis was the frequency of psychiatric or cardiovascular hospitalisations, emergency room visits, and cardiac catheterisation and revascularisation procedures. The number of psychiatric or cardiovascular hospitalisations was lower in the sertraline group than in the placebo group (55 versus 76). This difference did not achieve statistical significance, (p=0.054).	The effectiveness study showed that fewer adverse events were observed in the sertraline group than in the placebo group, the difference was not statistically significant. The use of 24-wk sertraline for the treatment of depression in a population with acs led to a trend towards fewer cardiac or depressive events, without increasing the costs from the perspective of a 3 rd party payer. The preliminary results suggested that AD rx with sertraline among patients with ACS might be cost-effective and provide a strong rationale for the routine identification and tx of depression in this at-risk population.	Perspective: 3 rd Party Payer Currency: \$ Cost year: 2001/2 Time horizon: +/- 6 months Discounting: not relevant Funded by : Pfizer -Industry Internal validity: 19/10/6

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Katon, 2006 USA	<u>Comparators:</u> IMPACT intervention=structured collaborative care programme delivered by depression care manager (DCM) (nurse usually). Provided behavioural activation (i.e. structured + activities e.g. exercise) and an initial choice of problem solving treatment developed for 1° care (PST-PC) OR enhanced treatment with Ads prescribed by 1° care physician	Diabetic patients >60 meeting MDD/Dysthymia - DSMIV Setting: 1° care Source of clinical effectiveness data: IMPACT RCT, n=418 Source of resource use estimates: detailed records of all patient contacts Source of unit costs: cost-accounting data (capitated systems-HMOs)& actual revenues generated from services provided(fee-4-service systems)	Cost-effective analysis, cost-utility analysis	<u>Costs:</u> outpatient mental health costs=ADs, intervention specific and all outpatient speciality mental health. Mean salary and benefit costs of staff plus 30% overhead costs, intervention educational materials. Outpatient medical costs=urgent care and emergency, non-AD prescriptions, lab, x-rays, other outpatient care Inpatient mental health care costs. <u>Outcomes:</u> 1° health outcome= HSCL-20 No. of depression free days (DFDs) QALYs	Relative to usual care, intervention patients experienced 115 (95% CI 72–159) more depression-free days over 24 months. Total outpatient costs were \$25 (95% CI -1,638 to 1,689) higher during this same period. The incremental cost per depression-free day was 25 cents (-\$14 to \$15) and the incremental cost per quality-adjusted life year ranged from \$198 (144 –316) to \$397 (287– 641). An incremental net benefit of \$1,129 (692–1,572) was found. Increased mental health costs in the intervention group were balanced by lower ambulatory	Perspective: 3 rd party payer Currency: \$ Cost year: not mentioned Time horizon: 24 months Discounting: not mentioned Funded by : industry Internal validity: 24/5/6

	<p>Usual Care -1^o care physician made aware of depressive diagnosis and could provide ADs &/or referral to mental health speciality care.</p>				<p>medical costs. Health care plan investments of \$665 in outpatient costs in yr 1 were balanced by cost-savings of a similar amount in yr 2.</p> <p>Authors conclude: The IMPACT intervention is a high-value investment for older adults with diabetes; it is associated with high clinical benefits at no greater cost than usual care.</p>	
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Simon, 2007 USA	<p><u>Comparators:</u> Specialized nurses delivered a 12-month, stepped-care depression treatment program beginning with either problem-solving treatment psychotherapy or a structured antidepressant pharmacotherapy program.</p> <p>Care as Usual</p>	<p>2 stage screening process used to identify adults with depression and diabetes</p> <p>Setting: Primary care</p> <p>Source of clinical effectiveness data: Pathways Study RCT, n=329</p> <p>Source of resource use estimates: health plan cost accounting records</p> <p>Source of unit costs: general ledger costs, actual salary and fringe benefit costs + 30 % overhead rate</p>	Cost-effectiveness analysis	<p><u>Costs:</u> outpatient services provided or purchased by the GHC-grp Health Co-operative as well as all services provided by support staff</p> <p><u>Outcomes:</u> scl scores, depression free days</p>	<p>Over 24 months, patients assigned to the intervention accumulated a mean of 61 additional days free of depression (95% confidence interval [CI], 11 to 82 days) and had outpatient health services costs that averaged \$314 less (95% CI, \$1007 less to \$379 more) compared with patients continuing in usual care. When an additional day free of depression is valued at \$10, the net economic benefit of the intervention is \$952 per patient treated (95% CI, \$244 to \$1660).</p> <p>Author's concluded: For adults with diabetes, systematic depression treatment significantly increases time free of</p>	<p>Perspective: 3rd party payer</p> <p>Currency: \$ Cost year: not mentioned Time horizon: 24 months Discounting: not mentioned Not funded by Industry Internal validity: 23/7/5</p>

					depression and appears to have significant economic benefits from the health plan perspective. Depression screening and systematic depression treatment should become routine components of diabetes care.	
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Bosmans , 2006 Netherlands	<p><u>Comparators:</u> Disease management programme: comprised GP training in the provision of an integrated programme of screening, diagnosis, drug treatment (20 mg paroxetine once daily), supportive contacts and patient education.</p> <p>Unrestricted GP care</p>	<p>primary care patients, aged 55 years or older with =>5 Geriatric Depression Scale (GDS-15), diagnosis of MDD – on Primary Care Evaluation of Mental Disorders (PRIME-MD)</p> <p>Setting: primary care</p> <p>Source of clinical effectiveness data: Bijl et al. 2003,RCT, n=145</p> <p>Source of resource use estimates: patient home interviews</p> <p>Source of unit costs: standard national costs.</p>	Cost-utility analysis	<p><u>Costs:</u> Health service and patient health care and non-medical care direct costs were evaluated.</p> <p>The total costs were \$2,123 in the intervention group and \$2,259 in the control group. The mean difference was -\$136 (95% CI: -1,194 to 1,110; p=0.82).</p> <p><u>Outcomes:</u> rates of recovery, improvement in depression severity and QALYs. QALYs were calculated from the EQ-5D scores and the time spent in each state, linearly interpolated.</p>	Cost-effectiveness planes were presented for all three comparisons (recovery, improvement in severity and QALYs gained at 12 months). These indicated no statistically significant difference in cost-effectiveness between the two groups. Authors' conclusions The authors concluded that the disease management programme had no significant relationship with clinical outcomes, costs or cost-effectiveness.	<p>Perspective: health services</p> <p>Currency: \$; A conversion rate to euros (EUR) was given: \$1 = EUR 0.80. Cost year: 2002 Time horizon: 1 yr Discounting: not relevant Funded by: Dutch Health Care Insurance Board.</p> <p>Internal validity: 27/3/5</p>

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Simon, 2001 USA	<p><u>Comparators:</u> <u>Depression Management Programme</u> including education and telephone care management for all patients, antidepressant pharmacotherapy for most, and psychiatric consultation for those failing to respond to algorithm-based primary care treatment.</p> <p><u>Usual Care group</u></p>	<p>Adult patients with outpatient medical visit rates above the 85th percentile for 2 consecutive years. A 2-step screening process identified patients with current depressive disorders</p> <p>Setting: Primary care clinics</p> <p>Source of clinical effectiveness data: RCT, n=407</p> <p>Source of resource use estimates: Health plan administrative data systems, health plan-standardised claims, interviews</p> <p>Source of unit costs: Standard codes were translated into unit prices using Medicare's Prospective Payment System diagnosis-related groups for inpatient</p>	Cost-effective analysis	<p><u>Costs:</u> outpatient visits included all contacts with medical or ancillary providers (excluding radiology, pathology, and laboratory) and specialty mental health visits</p> <p><u>Outcomes:</u> Depression Free Days</p>	<p>The intervention program led to an adjusted increase of 47.7 depression-free days throughout 12 months (95% confidence interval [CI], 28.2-67.8 days). Estimated cost increases were \$1008 per year (95% CI, \$534-\$1383) for outpatient health services, \$1974 per year for total health services costs (95% CI, \$848- \$3171), and \$2475 for health services plus time-in-treatment costs (95% CI, \$880-\$4138). Including total health services and time-in-treatment costs, estimated incremental cost per depression-free day was \$51.84 (95% CI, \$17.37-\$108.47).</p> <p>Conclusion: Among high utilizers of</p>	<p>Perspective: 3rd party payer Currency: \$ Cost year: not mentioned Time horizon: 12 months Discounting: not relevant Not Funded by Industry Internal validity: 21/6/8</p>

		stays; Medicare's 1996 fee schedule ²⁵ for inpatient physician services, outpatient visits, and procedures; and Red Book average wholesale prices (First Data Bank, San Bruno, Calif) for prescribed drugs			medical care, systematic identification and treatment of depression produce significant and sustained improvements in clinical outcomes as well as significant increases in health services costs.	
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References:

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