Appendix 17: 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**
Katon, 2006 US	Comparators: IMPACT intervention=stepped collaborative care programme delivered by depression care manager (DCM) (nurse usually). Provided behavioural activation (that is, structured + activities, for example exercise) and an initial choice of problem solving treatment developed for primary care (PST-PC) OR enhanced treatment with antidepressants prescribed by primary care physician Usual care - primary care physician made aware of depressive diagnosis and could provide antidepressants and/or referral to mental health speciality care.	Diabetic patients >60 meeting MDD/ dysthymia –DSM-IV Setting: Primary 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	Costs: outpatient mental health costs= antidepressants, 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, laboratory, x-rays, other outpatient care Inpatient mental health care costs. Outcomes: Primary health outcome= HSCL-20	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% C I-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.	Perspective: 3rd party payer Currency: $ Cost year: not mentioned Time horizon: 24 months Discounting: not mentioned Funded by: industry Internal validity: 24/5/6

				No. of depression free days QALYs	Increased mental health costs in the intervention group were balanced by lower ambulatory medical costs. Health care plan investments of $665 in outpatient costs in year 1 were balanced by cost-savings of a similar amount in year 2. 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.	
O'Connor 2005 US	<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).	Cost-effectiveness analysis -cost-minimisation analysis was carried out (no statistically significant differences	<u>Costs:</u> Only costs strictly related to hospitalisations, emergency room visits, cardiac procedures and drug use.	The effectiveness study showed that fewer adverse events were observed in the sertraline group than in the placebo group, the	Perspective: 3rd Party Payer Currency: $ Cost year: 2001/2 Time horizon: +/- 6 months Discounting: not relevant

		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.	between the groups were found).	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	difference was not statistically significant. The use of 24-week sertraline for the treatment of depression in a population with acute coronary syndromes led to a trend towards fewer cardiac or depressive events, without increasing the costs from the perspective of a 3rd party payer. The preliminary results suggested that antidepressant treatment with sertraline among patients with ACS might be cost-effective and provide a strong rationale for the routine identification and treatment of depression in this at-risk population.	Funded by : Pfizer - Industry Internal validity: 19/10/6

				than in the placebo group (55 versus 76). This difference did not achieve statistical significance, (p=0.054).		
Simon, 2001 US	<u>Comparators:</u> Depression Management Programme 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. Usual care	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 Setting: Primary care clinics Source of clinical effectiveness data: RCT, n=407 Source of resource use estimates: Health plan administrative data systems, health plan–standardised claims, interviews Source of unit costs: Standard codes were translated into unit prices using Medicare's Prospective Payment System diagnosis-related	Cost-effective analysis	<u>Costs:</u> outpatient visits included all contacts with medical or ancillary providers (excluding radiology, pathology, and laboratory) and specialty mental health visits <u>Outcomes:</u> Depression Free Days	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-	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

		groups for inpatient 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, California) for prescribed drugs			treatment costs, estimated incremental cost per depression-free day was $51.84 (95% CI, $17.37-$108.47). Conclusion: Among high utilisers of 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.	
Simon, 2007 US	<u>Comparators:</u> Specialised nurses delivered a 12-month, stepped-care depression treatment program beginning with either problem-solving treatment psychotherapy or a structured antidepressant	2 stage screening process used to identify adults with depression and diabetes Setting: Primary care Source of clinical effectiveness data: Pathways Study RCT, n=329	Cost-effectiveness analysis	<u>Costs:</u> outpatient services provided or purchased by the GHC-group Health Co-operative as well as all services provided by support staff <u>Outcomes:</u> SCL scores,	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	Perspective: 3rd party payer Currency: $ Cost year: not mentioned Time horizon: 24 months Discounting: not mentioned Not funded by Industry

	pharmacotherapy programme. Usual care	Source of resource use estimates: health plan cost accounting records Source of unit costs: general ledger costs, actual salary and fringe benefit costs + 30 % overhead rate		depression free days	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). Author's concluded: For adults with diabetes, systematic depression treatment significantly increases time free of depression and appears to have significant economic benefits from the health plan perspective. Depression screening and	Internal validity: 23/7/5

					systematic depression treatment should become routine components of diabetes care.	

References

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