COST EFFECTIVENESS OF SIBUTRAMINE IN THE LONG-TERM OUTCOMES OF SIBUTRAMINE EFFECTIVENESS ON WEIGHT STUDY
Malone D1, Raebel M1, Porter JA1, Lancy P1, Conner DA2, Merenich JA1, Vogel EA4
1University of Arizona, Tucson, AZ, USA; 2Kaiser Permanente, Denver, CO, USA; 3Sanofi-Aventis Pharmaceuticals, Bridgewater, NJ, USA; 4Kaiser Permanente, Aurora, CO, USA
OBJECTIVE: To examine the cost-effectiveness of sibutramine plus a structured weight management program (WMP) versus only structured WMP. METHODS: Cost-effectiveness analysis based on a randomized controlled trial conducted within a managed care organization. The target population was obese or overweight persons. The economic horizon was two years (pre and post study enrollment). Perspective was from that of a managed care organization. The treatment arms consisted of either sibutramine plus structured WMP or only WMP. The primary outcomes were change in weight and percent change in weight over 12 months, and change in obesity-related and total medical costs 12 months prior to and 12 months after enrollment. Non-parametric bootstrap was used to generate 95% confidence intervals for incremental cost-effectiveness ratios. RESULTS: A total of 501 subjects were enrolled in the study, 281 receiving sibutramine plus structured WMP and 220 receiving only structured WMP. The mean (SD) weight loss was significantly greater in the sibutramine (13.7 (15.5) lbs) group than the non-drug group (5.0 (13.2) lbs) (p < 0.001). Obesity-related total cost between groups was different (p < 0.001), with a median of $408 for sibutramine compared to $58 for the non-drug group. The ICER for sibutramine was $44 (95% CI: $42 to $46) per additional pound of weight loss. Sensitivity analysis suggested that changes in physician costs a negligible effect on the results. If the cost of sibutramine was excluded, there was no difference between the groups with respect to obesity-related costs. A limitation of this study is that costs were estimated using national fees schedules for hospital and physician visits and average wholesale price for medications. CONCLUSION: Patients enrolled in a weight management program receiving sibutramine had greater weight loss and decrease in BMI at greater cost than did patients enrolled in the same program who did not receive sibutramine.

COSTS OF OBESITY IN THE UNITED STATES AND EUROPE: A REVIEW OF THE LITERATURE
Budhiaaro I, Derleth A, Martin ML
Health Research Associates, Mountlake Terrace, WA, USA
OBJECTIVE: To provide a broad picture of the costs of obesity using data from the US and major European countries. METHOD: Literature (2000–2004) was searched via Medline using cost keywords: cost, cost-effectiveness, cost-benefit, cost-efficiency. Selected citations were reviewed by title and abstract, followed by retrieval of relevant articles, review and synthesis of cost information. RESULT: Direct medical expenditures for obesity in the US were estimated to be between $70–$94 billion and $331 billion—with all obesity associated comorbidities included. This represented approximately 5.7%–9.4% of the adult direct health spending. Cardiovascular disease and diabetes constituted approximately 70% of the obesity-related cost. Indirect costs associated with obesity were estimated to be at least $48 billion. The expected mean costs for persons with BMI = 30–34 and BMI = 35–39 were 12% and 19% higher (respectively) than persons with BMI < 25. Women spent more than men for obesity care. In the US, Wyoming showed the lowest expenditure for obesity ($87 million), and California the highest ($7.7 billion). Direct costs of obesity in Europe were estimated between 1.5% and 4% of total health expenditures, with the UK, Germany and France all showing similar expenditures (1.5%). Expenses associated with comorbid hypertension, coronary heart disease and diabetes were the main drivers of cost in the UK (80.5%). Indirect costs in the UK were estimated at £2.1 billion, of which £1.3 billion (61%) was due to work loss. Drug interventions using Orlistat, Sibutramine and Metformin were all cost-effective with the cost per QALY gained ranging between £8,327 to £19,968 (€4,780 to €54,881). CONCLUSION: The costs attributable to obesity in both the US and Europe represented a significant portion of the national health expenditure for those countries reviewed, with comorbid cardiovascular disease and diabetes constituting the major components of obesity associated health care costs.