

Cost-effectiveness analysis of intensive blood-glucose control with metformin in overweight patients with type II diabetes (UKPDS No. 51).

Clarke,P; Gray,A; Adler,A; Stevens,R; Raikou,M; Cull,C; Stratton,I; Holman,R

UKPDS Group. United Kingdom Prospective Diabetes Study

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AIMS/HYPOTHESIS: To estimate the economic efficiency of intensive blood-glucose control with metformin compared with conventional therapy primarily with diet in overweight patients with Type II (non-insulin-dependent) diabetes mellitus. **METHODS:** Cost-effectiveness analysis based on patient level data from a randomised clinical controlled trial involving 753 overweight (> 120% ideal body weight) patients with newly diagnosed Type II diabetes conducted in 15 hospital-based clinics in England, Scotland and Northern Ireland as part of the UK Prospective Diabetes Study. Subjects were allocated at random to an intensive blood-glucose control policy with metformin (n = 342) or a conventional policy primarily with diet (n = 411). The analysis was based on the cost of health care resources associated with metformin and conventional therapy and the estimated effectiveness in terms of life expectancy gained from within-trial effects. **RESULTS:** Intensive blood-glucose control with metformin produced a net saving of 258 Pounds per patient (1997 United Kingdom prices) over the trial period (median duration of 10.7 years) due to lower complication costs, and increased life expectancy by 0.4 years (costs and benefits discounted at 6%). **CONCLUSIONS/INTERPRETATION:** As metformin is both cost-saving in the United Kingdom and extends life expectancy when used as first line pharmacological therapy in overweight Type II diabetic patients, its use should be attractive to clinicians and health care managers alike.