OBJECTIVES: This study examined resource utilization and direct, indirect, and procedure-related costs associated with photoacoagulation and vitrectomy procedures among employees with diabetic retinopathy (DR). METHODS: Health care utilization and costs of DR employees age 18–64 were examined using claims from 17 large self-insured U.S. employers (1999–2004). Indirect costs (work loss, absenteeism) were estimated using disability claims and absenteeism information. The study sample included employees who had at least one diagnosis of DR based on ICD-9 codes and were enrolled continuously for 12 months. Cost outcomes were examined over a randomly chosen 12-month (study) period following the DR diagnosis. Annual total (i.e., health care plus indirect) costs (2005 USD) were compared between DR employees who did and did not undergo a procedure. Utilization and costs were measured on the procedure date and during the 30-day follow-up period. RESULTS: The study sample consisted of 2,098 DR employees. The average age was 51 years; 67.4% were male and 64.7% had type 1 diabetes. Approximately 11.8% (n = 247) of DR employees received phacoacoagulation procedures during the study period; 2.1% (n = 44) received vitrectomies. DR employees with phacoacoagulations had average total costs that were approximately double those of other DR employees ($34,539 vs. $16,041, p < 0.001); employees with vitrectomies had costs that were over 3.5 times higher than non-vitrectomy DR employees ($63,933 vs. $17,239, p < 0.001). Indirect costs accounted for about 10% of these differences. More than half (58.7%) of employees had multiple phacoacoagulations within the study period and the majority of employees with vitrectomies received multiple procedures on the same day. Most (76%) phacoacoagulations were performed in physicians’ offices; nearly all (96%) vitrectomies were performed in an outpatient or ambulatory surgery setting. CONCLUSION: Photoacoagulation and vitrectomy procedures were associated with substantially higher costs among DR employees. Indirect costs were a substantial but not dominant driver of cost differences.

A PHARMAECONOMIC EVALUATION FOR THE TREATMENT OF MEXICAN PATIENTS WITH DIABETES TYPE 2
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OBJECTIVES: Diabetes mellitus type 2 (DM2) is a high prevalence disease in Mexico which represented expenditures in the Mexican Health System above US$450 millions. The purpose of this study was to compare the cost–effectiveness ratios between multiple pharmacologic treatments for adult patients with DM2 who didn’t reach metabolic control (HbA1C < 7%) using oral hypoglycemic agents or diet from the Mexican health care payer’s perspective. METHODS: We used a ten-year Markov analysis model to estimate costs and effectiveness. Markov model includes several DM2 complications stages (retinopathy, cardiovascular diseases, neuropathy, nephropathy and death). Effectiveness measure was the number of life years gained (LYG). Transition probabilities were obtained from international published literature (UKPDS studies). Comparators were: NPH insulin, glargine insulin, inhalable insulin, NPH insulin + metformin and pioglitazone + metformin. Resource use estimations were performed employing hospital records in second and third health care level hospitals from the Social Security Mexican Insti-