

Effect of the Pharmacist-managed Cardiovascular Risk Reduction Services (CVRRS) on the Diabetic Retinopathy Outcome Measures

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Diabetes mellitus is affecting many people throughout the world. Diabetic retinopathy (DR) is a long-term complication of diabetes associated with impaired vision. If left untreated DR may eventually lead to blindness. DR is caused by a damage to the small blood vessels in the retina. According to the American Academy of Ophthalmology, 5-10 % of the diabetic patients with normal retinal exams will develop DR within a year of their last retinal exam. The diabetic individuals who currently have DR are similarly susceptible to developing more severe retinopathy. Unfortunately many individuals with diabetes fail to receive education about maintaining glycemic control, medication management and recommended frequency of tests to monitor diabetic complications such as DR. Several studies have shown that the disease management services are effective in improving the quality of care for persons with diabetes. An increasing number of disease management programs utilize pharmacists to assist in the disease management of diabetic individuals. For this clinical study we evaluated the effect of pharmacist-managed CVRRs on the development of DR in over 100 diabetic individuals. The patient records were assessed for demographics (e.g. age, sex etc.), metabolic parameters (lipid profile, HbA_{1c}) along with number of pharmacist appointments and ophthalmology records. We observed that 95% of the patients who have had pharmacist intervention have been able to keep their retinopathy from getting worse or have improved it. Our studies suggest that there is a correlation supporting the theory that pharmacist intervention helps manage or reduce the severity of DR. Further studies can be conducted in the area to find potential ways to help decrease the severity of DR in patients with diabetes and maybe even prevent diabetic patients from developing DR.