

The prevalence of proliferative retinopathy (10.5%) predicts 41 patients with this stage of disease. Over 90% of these patients have already received panretinal laser photocoagulation therapy¹. One-hundred and fifty-two patients are thought to have non proliferative retinopathy (38.7% prevalence). The prevalence of clinically significant macular edema (CSME), a subset of those patients with non-proliferative diabetic retinopathy, was 10.0% (81 of 902 eyes)¹. This figure may over estimate the prevalence of CSME in a random population of diabetics with retinopathy since the subjects Kingsley studied were followed for an average of twelve years. If the incidence in the unselected population of the Clinton area is half of that reported by Kingsley, 5.5% (40 eyes) of the population may be eligible for laser photocoagulation according to criteria established by the Early Treatment Diabetic Retinopathy Study¹⁰. Data from the Claremore area in 1990 suggest an overall prevalence of diabetic retinopathy of 34% in a cross-sectional screening program for known diabetics. This figure is comparable to the 49.3%⁷ to 67%¹ reported by Newell and Kingsley respectively since their patients were followed in a longitudinal fashion. If indeed, 5.5% of the diabetic Native population in Oklahoma has clinically significant macular edema, 642 patients (1284 eyes) are in need of macular photocoagulation. Multiple treatments are often needed for each eye. In discussing these calculations with physicians in the Indian Health Service, they consistently comment that these numbers are a significant underestimate of the real problem.

Methods

Initial site selection has been narrowed to four communities: Ada, Clinton, Claremore and Tahlequah. Indian Health Service Hospitals, present in each of these communities, are involved in planning the project.