

Diabetic Retinopathy Screening/Monitoring

- I. Background: Diabetic retinopathy is the leading cause of blindness among American Indians and Alaska Natives. Early detection and timely treatment of diabetic retinopathy can often delay or prevent severe vision loss.

Advances in the management of diabetes mellitus have resulted in an increase in longevity. Patients with a longer duration of diabetes are more likely to develop retinopathy. The opportunities for intervention in diabetic retinopathy are more effective when the disorder is treated early. Unfortunately, visual symptoms in diabetic retinopathy occur late. For these reasons, an effective screening program for diabetic retinopathy is essential in any comprehensive eye care program.

The diabetic retinopathy screening and monitoring process is essential to provide early detection in the management of diabetic retinopathy and monitoring the progression of retinopathy to ensure timely referral. The following protocol is recommended for establishing a screening, monitoring, recall, and referral system.

- II. Screenings Protocol for Eye Disease in Diabetes Mellitus. All patients with diabetes mellitus should be screened for eye disease each year. An annual dilated retinal examination by optometry or ophthalmology and/or wide-field imaging should be performed. Wide-field imaging obtained by a certified imager and read by a trained/certified optometrist or ophthalmologist is recommended. The Category 3 Indian Health Service/Joslin Vision Network Teleophthalmology Program fulfills these requirements. Diagnosis of the presence/absence of retinopathy and the level of retinopathy according to the Early Treatment Diabetic Retinopathy Study standard should be determined for either type of examination. When seen by an optometrist or ophthalmologist, the examination should also include the minimum eye examination components listed below.

- III. Minimum Eye Examination Performed in the Eye Clinic. The suggested minimum diabetic exam performed by an optometrist or ophthalmologist includes:

1. Visual acuity;
2. Biomicroscopy;
3. Tonometry; and
4. Dilated retinal examination and/or wide-field imaging, as appropriate.

Recommended Disposition of Patients by Diagnostic Groups. Each Indian Health Service facility's Resource and Patient Management System has patient recall capability

and should be used to maximize compliance for diabetic eye exams and retinopathy screenings according to guidelines developed by reputable national eye care organizations such as the American Optometric Association Clinical Practice Guidelines and American Academy of Ophthalmology Preferred Practice Patterns.