

health  
**technology**  
assessment



EXECUTIVE  
SUMMARY

**SCREENING FOR  
DIABETIC  
RETINOPATHY**

HEALTH TECHNOLOGY ASSESSMENT UNIT  
MEDICAL DEVELOPMENT DIVISION  
MINISTRY OF HEALTH  
MOH/PAK

## **EXECUTIVE SUMMARY**

### **INTRODUCTION**

Diabetic retinopathy is a microvascular complication of both insulin dependent (type I) and non-insulin dependent (type II) diabetes. The diagnosis of diabetic retinopathy is through either examination of the fundus of the eye or by fundus photography.

### **OBJECTIVE**

To determine the effectiveness, cost effectiveness and feasibility of screening for diabetic retinopathy.

### **RESULTS, CONCLUSIONS AND RECOMMENDATIONS**

1. It is recommended that there be a screening programme for diabetic retinopathy for all diabetic patients.
2. Screening should include assessment of vision and retinal examination (ophthalmoscopy) with or without photography. Photography could be carried out using non-mydratic fundus cameras (conventional or digital). The local cost of a conventional fundus camera is approximately RM 100, 000 per unit, while a digital camera would cost about RM 120, 000.
3. Initial screening be carried out by primary healthcare providers, followed by retinal photography by trained personnel (technicians, optometrists or ophthalmologists) technicians. Fundus photographs or fundal digital images should subsequently be read by trained readers or ophthalmologists.