



Service Priorities and Programmes
Electronic Presentations

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Quality Assurance of Diabetic Retinopathy Screening in Primary Care

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Introduction

Diabetic retinopathy (DMR) screening by retinal photography has been implemented in community care centers in New Territories West since 2005. Starting from April 2011, the program is enhanced under Risk Assessment & Management Program (RAMP). It involves optometrist to provide digital retinal photography capture and grading of all the retinal photos. Family medicine specialist with DMR training background will provide the quality assurance by cross checks all the retinal photos deemed abnormal by optometrist and random checks 1 out of 10 retinal photos considered normal by optometrist on regular basis. For those incompatible results, consensus will be sorted after discussion and back up by Ophthalmologist if needed. International Clinical Diabetic Retinopathy Disease Severity Scales is used as the grading reference.

Objectives

To review the compatibility of the diabetic retinal photos grading between optometrists and Family Medicine Specialists

Methodology

Retrospective review of results of patients attending for diabetic retinopathy screening in Tuen Mun and Yuen Long Community Care Centers from Jun 2011 to Dec 2012. Primary outcome are the number of diabetic retinopathy screening performed by optometrist, proportion of digital retinal photography counter-screened by Family Medicine Specialist and the compatibility of their results.

Result

13,861 digital retinal photos of DM patients had been captured by optometrists within the study period and 4,119 (30%) were counter checked by Family Medicine Specialists. Overall compatibility reached 95.5%. Among those retinal photos graded as normal by optometrist, the compatibility with doctors grading is approaching 100%.

A small percentage of disagreement falls into the abnormal group, ranges from 3% to 9%. Percentage of disagreement appears higher during rotation of new optometrist. No adverse patient outcome was reported due to the disagreement in grading.