

The South African Diabetic Retinopathy Screening Program Launches

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South Africa has not had a screening program until recently. The Ophthalmologic Society of South Africa (OSSA) has launched a Diabetic Retinopathy screening program for South Africa. This has been administered and funded by the African Eye Foundation.

The key component of the system is the Patient Held Record titled “What is the score?” (see attachment). This serves a combined function as a patient information sheet for patients, their families and caregivers and as a “cheat-sheet” for healthcare practitioners to learn the grading system. The Scottish Diabetic Retinopathy grading system for screening has been chosen for use in SA. This system is a simple hierarchical system for grading features of retinopathy. The system allocates grades for retinopathy (R1-4) and Maculopathy (M1-2). A key objective is to encourage access to screening close to the point of primary care to help encourage skill development at a local level. This is particularly important with increased appreciation of the systemic importance of diabetic retinopathy detection.

Systemic risk has been incorporated into the system utilising the Risk calculator developed by Prof Einar Steffanson (www.risk.is). A subsidiary site has been established at www.riskafrica.co.za. This is used as a counselling tool for patients and to modify the follow up algorithm.

An internet based Patient tracking database has been established to enable common record keeping and look up by non-screening practitioners (www.diabeticregister.co.za). This is accessed with the patient's consent utilising their database number.

A concerted effort has been made to increase access to screening opportunities by enlisting Optometrists and General Practitioners. The Scottish External Quality Assurance (EQA) has been utilised as a means of establishing an accreditation process. This internet based system involves grading 100 fundus images. The individual sensitivity and specificity is then plotted on a Receiver Operating Characteristic curve (ROC). The results are fed back to the individual with their position marked in relation to the (anonymous) peer group. The Scottish experience has been that the system encourages learning over time and their experience shows a greater conformity over time. 282 healthcare practitioners have completed the EQA process.

A directory has been established at www.diabeticretinopathy.co.za to allow patients to find accredited screening services.

The diverse range of healthcare scenarios and levels of practice have necessitated an innovative approach to the program. This needs to be suited to public and private sector needs. The system is now ready to provide patients with access to screening. This will enable people living with diabetes to access retinopathy screening and to “know their score” in the fight against the complications of diabetes.

The next step will be to raise awareness regarding the need for screening to the general public. This will be marketed on the basis of the need for screening as a blindness prevention strategy and emphasising the importance of retinopathy as a biomarker for systemic vascular complications of diabetes mellitus. Healthcare practitioners are being educated to “screen for life” as the detection of any retinopathy is critical to inform of risk of coronary artery disease and stroke (2x risk). The system can be used more generally in other countries at low cost. It is highly suited to situations where healthcare is in evolution.

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