



**Title** **Organization of Services for Diabetic Retinopathy Screening**  
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## Aim

To determine the most effective and efficient approach to achieving, implementing, and sustaining a quality assured screening program for diabetic retinopathy in Scotland that takes account of patient requirements.

## Conclusions and results

A national screening program should be organized within current health service structures in Scotland and must be integrated with routine diabetes care as outlined in the Scottish Diabetes Framework. NHS boards should have the responsibility for implementing the program in their area. Digital retinal photography has been shown to achieve high sensitivity and specificity for sight-threatening disease. Indirect ophthalmoscopy has also proven to be sensitive and specific enough to be viable as a model for a national screening program. Mydriasis may be required in some cases prior to screening. Patients should be informed about the screening process.

## Recommendations

A national systematic diabetic retinopathy screening program for Scotland should be established to detect referable retinopathy. The screening program should:

- Utilize a three-stage process based on non-mydratic digital cameras, with the use of mydriasis and slit lamps where necessary.
- Be performed by appropriately trained, accredited, and competent professionals.
- Enhance existing schemes to achieve the approved quality assured specifications.
- Ensure screening is accessible to all diabetic patients, whether they receive community and/or hospital based diabetic care. Local implementation may include services in diabetes centers, primary healthcare facilities, mobile vans, or community optometrists.
- Be evaluated as the screening program is implemented and reviewed in the light of further research to enable optimal service provision.

## Methods

Clinical effectiveness, organizational issues, and patient issues were appraised, and an economic evaluation was performed. Systematic literature searching was used to identify evidence published in the scientific literature. Evidence was submitted from professional and patient groups, manufacturers, other interested parties, and experts. The views and preferences of patients were elicited and considered.