



SCOTTISH EXECUTIVE

Health Department

**NHS Circular:
HDL(2003)33**

Dear Colleague

DIABETIC RETINOPATHY SCREENING SERVICES

Summary

This HDL outlines the support available to NHS Boards and the steps which Boards need to take to provide diabetic retinopathy screening to all people with diabetes by March 2006, in line with the report [*Diabetic Retinopathy Screening Services in Scotland: Recommendations for Implementation.*](#)

Action

The transition from existing arrangements for retinopathy screening to a comprehensive model envisaged by this Circular will be a process of evolution, particularly for Boards which still have schemes based on slit lamp examination and particularly as a number of the tools to be used are still under development. Until the national software solution is made available, NHS Boards should:

- identify an individual with responsibility for co-ordinating the diabetic retinopathy screening programme;
- continue to provide diabetic retinopathy screening under existing arrangements, including the use of standard clinical appointment systems;
- work with Regional Planning Groups to explore the potential for joint working and sharing of facilities;
- contact NSD and participate in the national DRS collaborative group;
- ensure that the local diabetes register is accurate and complete;
- take steps to purchase the necessary digital cameras (noting the opportunity for group purchase);
- develop a local implementation plan as part of the Diabetes Managed Clinical Network, in accordance with the timetable in Annex D of the DRSIG report.

Yours sincerely,

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Director of Service Policy
And Planning

DR E M ARMSTRONG
Chief Medical Officer

24th July 2003

Addresses

For action

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INVESTOR IN PEOPLE



DIABETIC RETINOPATHY SCREENING SERVICES

Background

1. [HDL\(2002\)81](#) drew attention to the milestones and action points in the *Scottish Diabetes Framework*. Paragraph 13 indicated that the Scottish Diabetes Group had set up a sub-group to recommend how best to implement the HTBS Health Technology Assessment and associated Advice on the *Organisation of Services for Diabetic Retinopathy Screening*, published in April 2002, which establishes the benefits of a national screening system based on digital photography. These benefits include high sensitivity and specificity for sight threatening disease, the ease of image acquisition, storage and transmission, the facility for external quality assurance and cost effectiveness.

2. The Sub-Group's report, *Diabetic Retinopathy Screening (DRS) Services in Scotland: Recommendations for Implementation* is published today, with the approval of the Minister for Health & Community Care. The report puts forward a series of pragmatic recommendations to ensure that DRS is implemented on the basis of the Health Technology Assessment within a reasonable timescale. This HDL concentrates on Boards' responsibilities, but also sets out the arrangements that are being put in place nationally to support Boards' efforts and to ensure maximum consistency of approach and uniformity of standards across Scotland. Implementation of the programme will also ensure Scotland leads the way internationally in establishing a national, high quality screening programme for diabetic retinopathy.

3. Boards will want to make sure, in taking forward these recommendations, that this work is developed within the overall context of the Diabetes Managed Clinical Networks which are evolving in each Board area from the Local Diabetes Service Advisory Group. The development of the DRS arrangements will promote common aims such as the creation of diabetes registers, the involvement of patients and the clarification of quality assurance arrangements.

4. The Chief Executive of the NHS Board will be responsible and accountable for the delivery of the diabetic retinopathy screening programme in their Board area. Specific responsibility for co-ordinating the individual functions of the programme should be clearly vested in a designated person. Some of the individual functions may be managed by other members of the NHS Board staff, but there must be one person with delegated responsibility and authority for co-ordinating and monitoring the programme.

Aims of the Screening Programme (*paragraphs 1-14*)

5. The primary objective of the screening programme is the detection of referable (sight-threatening) retinopathy. This will be achieved in Scotland by implementing a quality assured screening programme based on retinal photography and national standards. All patients with diabetes aged 12 and over in Scotland are to be offered diabetic retinopathy screening using digital photography within an organised NHS Board programme that meets the recommendations of the HTA and the report produced by the Diabetic Retinopathy Screening Implementation Group. **The objective is to complete this process and have a comprehensive programme fully operational throughout Scotland by March 2006.**

6. As the Report points out (paragraph 16), the term 'screening' has been used for convenience. What is being introduced is a risk reduction programme, and it is essential that Boards should clearly articulate what the programme is designed to achieve, and what its limitations are.

Patient Information and Patient Perceptions (*paragraphs 15-23, 93-97*)

7. Patients require appropriate and consistent information about the programme. To support this, a single patient information leaflet template is being developed and will be published in the DRS manual which will draw together all relevant guidance, and on the diabetes website <<http://www.diabetesinscotland.org>>. Boards are responsible for production of the leaflet locally. The DRS Manual will also contain example letters to patients and healthcare professionals to ensure consistency of messages to patients throughout the invitation, screening and treatment process. All patient information should be accessible to people with impaired vision and should conform with RNIB guidance. Patient information leaflets in relevant minority languages will be created centrally and made available for adoption locally. It is essential that Boards monitor service uptake and measure patient satisfaction. The Report recommends that Boards must have clear mechanisms for identifying and acting on refusals, as well as ensuring that patients are made aware of the implications for themselves should they decline the offer of being screened.

Software to Support Diabetic Retinopathy Screening (*paragraphs 52-64*)

8. The software to support the screening programme will be purchased centrally and made available to NHS Boards. This procurement will be co-ordinated by NSD. The intention is that a reliable solution will be ready for implementation by September 2004.

9. The software solution will integrate or interface the functions of image acquisition, call-recall, grading and quality assurance. The demographic data required to populate the DRS system will be supplied by the local clinical management system, which in most cases will be SCI-DC. The results of the screening process (including a compressed image) will be fed back into the local clinical management system. The software being procured nationally will be designed to interface with SCI-DC as the preferred national system for the diabetic register. Any NHS Board not wishing to adopt SCI-DC will need to meet the costs of the interfaces required between the national call recall software and the local diabetic register, and must satisfy NSD that their system will deliver fully comparable results.

Cameras (*paragraphs 45-51*)

10. The National Screening Committee published in February 2003 a recommended specification for cameras, which can be found on the NSC website (A National Screening Programme for Sight-Threatening Diabetic Retinopathy) <<http://www.nscretinopathy.org.uk>>. Boards will be given the opportunity of purchasing cameras as part of a group purchase. Scottish Healthcare Supplies will contact Boards to ascertain if such a joint approach would be supported. The cost of SHS co-ordination of joint procurement will be met centrally.

Training (*paragraphs 39-42*)

11. Retinal screeners and graders will require specific training, accreditation and regular performance assessment. NSD will liaise with users to assess training requirements and commission appropriate training centrally on behalf of NHSScotland. NHS Education for Scotland has been asked to accredit the training curriculum and materials. Training should be delivered as locally as possible to enable the photographers to be trained on equipment relevant to them. In addition, local training will allow the local ophthalmologist (who is also likely to be the level 3 grader) to deliver the training on grading and so develop confidence in the graders' ability. A training handbook for screeners and graders has now been published. A national proficiency scheme to ensure the competency of staff involved in grading will be set up and commissioned by the National Services Division.

Grading (*paragraphs 43-44*)

12. A revised version of the grading scheme recommended in the HTA - the Scottish Diabetic Retinopathy Grading Scheme 2003 - is included as Annex E to the Report. The 2003 Grading Scheme can be used manually and NHS Boards are encouraged to adopt it as soon as possible. The associated grading software will be procured centrally, along with the software to support call/recall. Until a national grading software programme has been procured, use of the Scottish Diabetic Retinopathy Grading Scheme 2003 is at the discretion of each Board.

Impact on Ophthalmology Services (*paragraphs 75-83*)

13. The net effect on ophthalmology services of the introduction of a national diabetic retinopathy screening programme is likely to be modest, but the impact should be monitored by NHS Boards. Waiting times for referrals to ophthalmology from screening should also be audited. Ophthalmology services will require appropriate digital photography equipment as well as access to the Diabetes Clinical Management System and NHS Network. Boards must provide adequate protected clinical time to allow ophthalmologists to act as level 3 graders.

National Support, Monitoring and Teamworking (*paragraphs 84-92*)

14. A national DRS collaborative group is being established under the auspices of National Services Division. In addition to supporting networking opportunities, an executive group will be set up to shape operational policies and oversee quality assurance. The executive group will be drawn from all stakeholder groups and will be chaired by an experienced clinician. The group will be supported by a full-time co-ordinator who will be taking up post during Summer 2003. One of the important roles of the co-ordinator will be to facilitate the exchange of information and ideas between screening centres.

15. The main method for assessment of the performance of NHSScotland in the operation of DRS will be the reviews undertaken by NHS Quality Improvement Scotland of the published Diabetic Retinopathy Screening Standards. Review visits will commence when DRS services are in operation. In the interim, information about progress towards improving DRS will be published in the annual Scottish Diabetes Survey, in the Diabetes Annual Reports published by NHS Boards and as part of the NHS Quality Improvement Scotland review of the diabetes services.

16. A national dataset to be used by the DRS programme will be defined by the DRS collaborative network in conjunction with ISD. This will build upon the Scottish Diabetes Core Dataset. It is essential to ensure that clinicians responsible for ongoing diabetes care have full access to the results of retinopathy screening.

National Standards, Quality Assurance and Standard Setting (*paragraphs 65-74*)

17. Boards are accountable for monitoring and performance management of the screening service and for overseeing the day-to-day quality control. NHS Quality Improvement Scotland has overall responsibility for QA and has now published draft standards for diabetic retinopathy screening. Open meetings to consult on the draft standards will be held in October 2003.

18. To ensure consistency of approach, National Services Division is working with healthcare professionals and NHS Boards, to define protocols and guidance on the practical administration of diabetic retinopathy screening programmes, including call/recall and quality assurance. A DRS Manual will be published in autumn 2003 to draw together all the relevant guidance on implementing and operating retinopathy screening. Central to this will be the national rule set determining who should be called to screening and the protocol for recalling patients with integral failsafe arrangements. It is important that all NHS Boards implement the national rule set and do not develop local variations.

19. Systematic confidential clinical audit of the screening history of all incident cases of blindness due to diabetic retinopathy should be co-ordinated by a doctor designated by the NHS Board. This audit should be carried out in conjunction with the Diabetes MCN and should involve other health professionals as appropriate to the local programme. NHSBoards should provide ISD with anonymised data on the outcome of this audit for the purposes of an aggregated National Return.

Funding requirements (*paragraphs 102-107*)

20. The Scottish Executive has committed over £1.2 million over the next three years to support the central components of the programme, including:

- purchase of call/recall and grading software
- support for a DRS collaborative group including a co-ordinator and a lead clinician
- standards documentation
- guidance on operational issues including patient information (DRS Manual)
- training materials (Training Handbook)
- central costs of procurement
- proficiency testing of graders

21. The main costs to be picked up by NHS Boards are the purchase of digital cameras, computer hardware (PCs, servers etc) and all revenue costs. The Implementation Group's report indicates (paragraph 103) that the total recurring costs of implementing DRS will be around £3m a year for Scotland as a whole. This implies annual revenue costs for most Boards of around £150,000 - £350,000, although this will not all be additional cost since most Boards are already screening a significant number of people with diabetes. The Report indicates (paragraph 104) that Boards are expected to clarify the funding arrangements to deliver the DRS programme in the long term. With this in mind, Boards may wish to refer to the updated Budget and Implementation Scenarios which NHS QIS has produced and which is available on its website <<http://www.htbs.co.uk/news/features.asp?did=69>>.

22. Important cost savings could be made by collaboration between NHS Board areas. This could include operating shared call/recall or grading centres, or sharing cameras and vans. The issue of joint working should be considered by the Regional Planning Groups, as is already happening in the North of Scotland Planning Group.

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