

Scottish Diabetic Retinopathy Screening Programme

ANNUAL REPORT

2011



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The completed Annual Report should be sent electronically by 31 May following the reporting year to:

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Service: National Diabetic Retinopathy Screening

Service

Report: Annual report 2011-2012

SECTION A: GENERAL DESCRIPTION OF SERVICE/PROGRAMME

1 Overview/Aim of Programme

People with diabetes can develop a condition affecting the eyes called retinopathy, which although initially asymptomatic can lead to partial loss of vision and eventual blindness. Research has shown that early detection of sight threatening diabetic retinopathy through screening, and subsequent treatment of those affected by laser photocoagulation, can substantially reduce the risk of visual loss.

In July 2003 the Scottish Executive Health Department issued guidance (HDL (2003)33) to Health Boards to the effect that each Board should take steps to provide diabetic retinopathy screening for all people with diabetes over the age of 12 to the standards recommended by the Health Technology Board for Scotland in its report published in April 2002 and according to subsequent guidance on its implementation, as part of a Scottish National Diabetic Retinopathy Screening Programme.

The national Diabetic Retinopathy Screening Programme (DRSP) is an integral part of patients' diabetes care and involves a regular (usually annual) eye check using a digital photograph of the retina or slit lamp examination if photography is not possible. The primary objective of the programme is to detect referable (potentially sight-threatening) retinopathy so that it can be treated at a stage where the probability of preservation of vision is high.

The DRS Collaborative has been established to bring together individuals from all NHS Boards in Scotland involved in the delivery of the retinopathy screening programme, including representatives of the various professions involved as well as patient representatives and other stakeholders. The aim of the DRS Collaborative is to facilitate the delivery of the national diabetic retinopathy screening service in Scotland through the development and maintenance of effective service interfaces across Scotland, and the provision of support for good practice.

What is Diabetic Retinopathy?

People with diabetes have a higher chance of developing certain serious health problems, including damage to the eyes. A well-recognised and common complication of diabetes is damage to the blood vessels in the retina, the nerve fibre layer at the back of the eye. This is known as retinopathy and is the largest single cause of blindness amongst adults of a working age in the UK (*Scottish Diabetes Framework*, April 2002). In its early stages, diabetic retinopathy is symptom-free and progression of disease can be prevented by laser treatment or by improved metabolic and/or blood pressure control.

2 Description of Screening Pathway

- a) All patients with diabetes in Scotland over the age of 12 are to be offered diabetic retinopathy screening using digital photography within an organised NHS Board programme that meets the recommendations of the Health Technology Assessment published in 2002.
- b) An invitation to patients will be automatically sent on an annual basis to invite them to screening or more frequently if the screening programme requires it– to all those aged 12 and over. Patients will be automatically sent reminder letters if they fail to attend and they may only be permanently suspended from the programme by their GP. Patients will be sent result letters within 20 working days of the appointment. The patients GP or care provider will also be sent a result letter. The patient result letter will inform patients of the follow outcomes
 - No retinopathy
 - Mild retinopathy
 - Observable maculopathy/ observable background retinopathy
 - Referable maculopathy / referable background retinopathy/ proliferative retinopathy

SECTION B: QUALITY DOMAINS

1 Efficient

- See Annex A for details of numbers invited and number screened/uptake by NHS Board of residence and for details of performance over the period 2008 to 2011.
- b) See Annex E for details of resources and staffing used across the Health Boards including workforce information, See Annex D for staff training and accreditation.
- c) See Annex C for details of the financial report for the DRS Collaborative.
- d) See Annex A for details of KPI 2 target of 80% uptake rate and invitation to 100% of eligible population.

2 Effective

a) Audit activity

An audit was undertaken during to report on the outcomes patients referred to Ophthalmology and treatment given. The results of this audit were not complete at the time of writing and they will be added to this report for next year.

Visits to Board areas were undertaken by Dr Ken Swa, M Black and N Lee. Health Board areas and departments were visited as part of the annual objectives of the DRS collaborative. These visits are undertaken to provide a general review of the area performance. There were no

outcomes or actions taken/being taken as a result. Further visits to all Health boards in Scotland are planned for 2012 on a rolling basis.

b) Clinical Outcomes/Performance against national standards –

Performance of the DRSP currently meets the essential requirements NHS QIS March 2004 standards by the use of the Soarian system and nationally agreed policies/procedures. Those essential QIS requirements are

Essential

- 2(a) 1 all eligible people have a written prompt to attend for screening at least once every year, unless a current screening result is already on the call-recall module.
- 2(a) 2 Arrangements are in place to reach people not on the diabetes register or accessible via their GP (e.g. long-stay institutions).
- 2(a) 3 a minimum of 80% of eligible people with diabetes attend a screening appointment within the last year. (See Annex A for performance results)
- 2(a) 4 Screening uptake (KPI 2) is monitored at NHS Board level and action taken where targets are not achieved. (See Annex A for performance results)
- 2(a) 5 The NSD protocol is followed for the management of nonattendees, both those who fail to attend appointments and those who actively opt out of the screening programme, taking into account patient choice and responsibility for their care.
- 2(a) 6 all staff involved in call-recall receive training in using the call-recall IT system before undertaking unsupervised work.
- 2(b) 1 A national protocol defining failsafe procedures for follow-up of eligible people with diabetes with referable grades of retinopathy is in use. See http://www.ndrs.scot.nhs.uk/Manual/Docs/Follow-up%20protocol%20v1.2.pdf for full details
- 3(a) 1 Photographs are taken using equipment and techniques in accordance with national guidelines.
- 3(b) 1 all staff have full training in retinal screening before working unsupervised, and all staff receive training in new techniques.
- 3(b) 2 Staff undertake continuing professional development (CPD) as per professional and/or national guidelines.
- 3(c) 1 A minimum of 80% of people screened are sent the result in writing within 4 weeks (20 working days) of the photograph being taken.
- 4(a) 1 only staff trained and accredited according to national guidelines sign-off reports.

- 4(b) 1 the images from a minimum of 500 randomly selected patients (or all images graded if less than 500 patients) per grader per annum, not otherwise referred to a third level grader, are reviewed by a third level grader.
- 4(b) 2 if clinically important grading errors are found, further investigation and/or additional training of the grader is carried out.
- 4(c) 1 Screening histories of eligible people with diabetes developing referable retinopathy are reviewed, and any areas in the programme which require improvement are identified and addressed.
- 4(c) 2 all services must submit national minimum dataset returns. (See Annex A for data returns)
- 4(d) 1 all grading staff in the screening programme participate in NSD proficiency testing as part of revalidation training. IQA and EQA programmes are in place.
- 5(a) 1 there is a referral process to a consultant ophthalmologist-led service for people with diabetes, with identified signs of developing diabetes-related retinopathy, in accordance with national grading recommendations.
- 5(a) 2 the diabetes care provider should be notified of all people whose eye examination has revealed retinopathy.

c) Service Improvement -

See Annex D for a report on staff training and accreditation undertaken over the reporting year. The training and accreditation coordinator has also highlighted that there are continuing issues regarding the following points -

- The lack of Optometrists within the DRS who are attaining City and Guild units.
- Only two candidates in two Health Boards have attained the Slit Lamp Accreditation Award.

The Training Coordinator has also informed all Service Managers that City & Guilds registrations are valid for 3 years. In September 2009 the existing DRS Certificate was upgraded to the new DRS Qualifications and all candidates already registered were given the opportunity to transfer (free of charge) to the new qualification and at that point their registrations were extended another 3 years. The end date for these registrations is 1st September 2012. All of the candidates registered via the Scottish Diabetes Collaborative are included. Any candidate who falls into this category must send their assessed units in the completed format to the Administration centre by 1st June 2012. This is to allow time for units to be internally verified and certificated.

Any Candidate who does not complete by the deadline date will need to re-register with City and Guilds at additional cost to either the Screening Programme or themselves.

NHS Lanarkshire is to be congratulated as all of their staff have now completed the City and Guilds accreditation. This is the first Health Board area in Scotland to have fully completed the qualification standard.

d) Research activities

There were two research projects carried out in conjunction with NHS Tayside and the Wellcome Trust Centre for Molecular Medicine based in Tayside University. We contributed effort in providing data from the Soarian system. These research projects which are still ongoing are led by Professor Helen Colhoun and Dr Helen Looker. We support these research projects by providing anonymised eye image data for patients from NHS Tayside. This research is regarding the treatment of diabetes and outcomes for patients.

Research activities for the 4 Nations diabetic screening programmes across England, Scotland Wales and Northern Ireland are also being supported and actively contributed to. Dr K Swa, Dr G Leese (NHS Tayside) and M Black are members of the research groups. Information exchange and direct research is being undertaken in order to create new understanding and national policies regarding screening intervals and risk based recall of patients for further screening.

3 Safe

 a) Risk Register and Adverse Events
 A risk register is maintained by the DRS Collaborative Co-ordinator a sample of some outstanding risks for the DRSP are outlined in Annex

b) Quality Assurance-

Internal (IQA) and External Quality Assurance (EQA) activities were undertaken by all graders in 2011. IQA is undertaken by all graders as a mandatory function of the Soarian system. This system passes a percentage of graded images up to the next level grader for assessment. Level 1 images are assessed by a Level 2 grader and Level 2 images are assessed by Level 3 grader. Level 3 graders are then assessed by the External Quality assurance system as provided and hosted by Aberdeen University. All graders participate in the EQA scheme; however its main purpose is to show that an equitable and high quality grading standard is maintained across all 9 grading centres in Scotland. See Annex B for an overview of national EQA performance for the 2 rounds undertaken in 2011.

As a result of having 2 significant individual from spring 2011 EQA the individual outliers had their grading performance reviewed for the 6 month period prior to EQA. No adverse outcomes were found. The DRS lead clinician in conjunction with the lead clinicians and public health consultants from the health board areas concerned were satisfied that the individual graders were performing to a high standard. The graders concerned performed satisfactorily in the autumn 2011 EQA round. An action plan was also developed to assist boards with the steps they may

need to consider should this happen in future. This action plan will be added to the EQA scheme and adopted as policy for DRS EQA.

c) Clinical Governance -

DRS Service across Scotland varies slightly where it sits within local NHS Board structures, some within CHP and some within Operational Divisions. They are required to participate in local configuration for clinical governance. For example as in NHS Lothian, the DRS service Lead Clinician sits on the local Ophthalmology Quality Improvements team as well as in the NHS Lothian DRS Steering Group both of which report to the Diabetes MCN. Both Diabetes MCN and Ophthalmology teams report to NHS Lothian's Clinical Governance & Risk Management board. Appointed DRS lead clinicians within NHS Boards report to their own Clinical or Medical Directors. All DRS Programs are expected to take part in local clinical and service audits. e.g. DNA audit in NHS Lothian.

d) Healthcare Acquired Infection (HAI) & Scottish Patient Safety Programme (SPSP).

DRS services across Scotland sit within local NHS Board structures. They are required to participate in the local healthcare acquired Infection (HAI) and Scottish Patient Safety Programmes (SPSP) of their hosting Health Boards. DRS Service managers, Lead Clinicians and DRS Public Health Consultants (Board Coordinators) within NHS Boards report on these matters to their own Clinical or Medical Directors.

e) Complaints & Compliments

NHS Boards deal with local complaints and compliments using their local procedures. The DRS Collaborative Coordinator has not had any serious complaints or compliments escalated to him for resolution or response although he has dealt with several general complaints from patients who express concerns regarding the letters being sent out in terms of wording and for patients who DNA. There were also complaints regarding the opting out policy and the requirement to have a GP authorise this.

4 Timely

- a) See page 18 for a table of Key Performance statistics for the 12 month period ending 31st March 2012. A summary is listed below.
 - 97.6 % of the total number of the currently eligible population was invited to screening in 2011-12 (KPI 1).
 - 79.4% of the total number of the currently eligible population attended at least once in the FY 2011 (KPI 2).
 - 76.7 % of the total number of the currently eligible population was successfully screened in FY 2011 (KPI 4)
 - 3.5% of the total number of the current eligible population were referred to Ophthalmology on account of retinopathy (KPI 13)

The KPI system which has now become available as of 1st April 2011 and provides detailed statistics on the following waiting/response times for 2011 such as the following.

- KPI 8 Duration to written report
- KPI 9 Written report success rate

- KPI 10- Twelve Month Recall result rate
- KPI 11 Six Month Recall result rate
- KPI 12 Six Month recall re-screen rate
- KPI 13 Referable Result rate
- KPI 14 Ophthalmology Report Interval
- KPI 15 Ophthalmology review target
- KPI 16 Ophthalmology attendance rate

b) Review of Screening Pathway

There were no formal reviews carried out in 2011 of the local screening pathway/process and procedures. Reviews and changes to the pathway are continuously suggested and implemented as part of the Request for Change process to implement changes within the Soarian system and as part of the policy or procedure changes as requested by actions from management meetings. The current pathway complies with all the requirements of the 5 QIS Standards 2004 as listed below

- STANDARD 1 Organisation
- STANDARD 2 Call-Recall and Failsafe
- STANDARD 3 Screening Process
- STANDARD 4 Proficiency Testing
- STANDARD 5 Referral

5 Person Centred

a) General

A national patient survey was carried out in 2010 of patients attending the DRS programme. The results of this survey were presented by Angela Ellingford at the national DRS Study Day 11th Nov 2010. See Annex G for a brief summary of the slides shown.

b) User Surveys/Action Plan

Patient surveys were undertaken in 2010:-

- 1. Patient Survey in NHS Lothian on DNA rates (Annex F)
- 2. Patient survey for the DRS programmes 2010. (Annex G)

6 Equitable

a) Fair for All: Equality & Diversity

The DRS Service supported an ethnic minority project in NHS Lothian with NHS Lothian's Minority Ethnic Health Inclusion Service (MEHIS) Link workers to target high risk ethnic diabetics from the South Asia region. These patients are in a high risk group for clinical reasons and also because they tend to have a high DNA rate. The project was still underway at the time of writing but the project outline and objectives are attached as

1. Annex H - Increasing the uptake of DRS appointments in higher risk South Asian patients in NHS Lothian.

The DRS Service as a national programme has not undertaken an Equality and Diversity Impact Assessment in last 3 years although individual Health boards may have completed this for their own local programmes. Patients are automatically referred via their GP or secondary care system into the programme based only on their diabetes diagnosis. Patients can also be screened if they are diagnosed with diabetes and present themselves at a screening clinic.

b) Geographical Access

Mobile DRS screening services are provided by some Health Board areas. Boards may also provide fixed or GP based screening clinics in remote or rural areas. NHS Highland, NHS Borders, NHS Western Isles and NHS Ayrshire and Arran use Optometry services for eye image capture, these are all listed and described in the programme delivery report (Annex E) for each Health Board.

SECTION C: LOOKING AHEAD / DEVELOPMENTS

See attached Gantt chart (Annex K) for the potential developments and changes that may affect the DRS Programme in the years ahead.

SECTION D: SUMMARY OF HIGHLIGHTS

Statement from the DRS Lead Clinician 2011 – Dr Kenneth K. Swa

I am happy to present this annual report for the DRS collaborative in Scotland.

We invite all people with diabetes who are eligible for annual diabetic retinopathy screening. For the first time, we are able to present the programme data collected from just one source (Soarian – The diabetic retinopathy screening national software) and extracted through the agreed Key Performance Indicators formulae. For the last 12 month period the annual uptake of screening was **79.4%** which is around the expected target of 80% for most screening programs in UK. However, we also continue to see increasing pressure on the programme with a total of 227,380 eligible patients recorded on the Soarian system as of 1st April 2012.

I am satisfied with the efforts made by all to date and encouraged by the continual effort to improve the uptake of screening despite the many constraints on the NHS in Scotland. We are now able to look further into other aspects of the program regarding non-attenders (DNA). NHS Lothian DRS team has led further investigations into this area and are sharing with the rest of the collaborative lessons learned, highlighting the age group, ethnicity, deprivation etc of individuals most likely not to attend. We have also looked into various aspects of uptake for ethnic minority groups in NHS Lothian as well as in NHS Glasgow & Clyde (Community Engagement Project) in conjunction with our partner RNIB Scotland. We are learning from these and look to implement ways to improve the screening uptake. Young people and specific ethnic minorities are of particular interest as these are the groups with most clinical risk and we will need a special effort in targeting these vulnerable groups.

We are working closely with our collaborative partners in England, Wales and Northern Ireland in relation to gathering evidence from all 4 Nations DR screening programs to recommend the most optimal intervals for future screening. We are also leading the research on DR progression in relation to key diabetes care data.

An HTA study of surrogate markers for diabetic macular edema was completed and we await the publication soon. We may need to review DRS referral criteria formally in the light of this evidence.

This is a crucial time for all of us in the DRS collaborative; we must work together in open debate and discussion to form agreement by consensus. At the same time we must never lose sight of the core business of detecting referable DR for people with diabetes so that timely appointments can be given and necessary investigation and appropriate treatment offered to prevent sight loss.

Dr Kenneth K. Swa, National Clinical Lead

DRS Collaborative, NSD

May 2011

In March 2011 objectives were defined and set as part of the annual report for the DRS Collaborative. Those objectives and outcomes are summarised here.

As part of the NSD annual reporting format for National Specialist Services and National Screening Programmes there is a framework of quality domains that we report against and these are:

- Efficient
- Effective
- Safe
- Timely
- Person Centred
- Equitable

Over and above these the DRS Collaborative have also set some key objectives for it to achieve in the year ahead. These are based on some of the strategic key challenges for the programme as distilled from the management group conference of 2010

- 1. To have robust and secure IT systems to support the requirements of the diabetic retinopathy screening Programme. In the coming year we will prepare and tender for a national system replacement. It is anticipated that a supplier will need to be contracted before year end (April 2012). The current Siemens Soarian system is due for replacement in Sept 2012.
- 2. To ensure that Key Performance Indicators (KPIs) are available and used to monitor the performance of DRS in Scotland. During the coming year the reporting of the uptake and performance of the DRS Service will be by using the definitive KPIs across Scotland.
- 3. To maintain and develop a national EQA programme with a bi-annual cycle to be undertaken by all graders in Scotland and to develop our policies for EQA.
- 4. To ensure that the screening programme meets the requirements of NHS QIS for Training and Accreditation of Staff. The collaborative will continue to facilitate the City and Guilds certification in Scotland and implement the Slit Lamp Examiners training and accreditation scheme for the Diabetic Retinopathy Screening Programme.
- 5. To maintain communication within the collaborative. The DRS Collaborative will organise a DRS management group conference and In-Service training day for all staff in November. Ongoing collaborative management meetings will continue to be held on a quarterly basis.
- 6. To coordinate work in Scotland to develop the national screening programme. We will implement a national first level automated grading system through computerised image analysis. The system will be available at no cost for an initial period.
- 7. To investigate and develop opportunities of electronic communications with patients and care providers in order to minimise the need for letter production from the Soarian system and to help reduce DNA rates for patients.
- 8. The Lead Clinician, Coordinator and System Specialist are to visit health board areas and meet with DRSP teams in order to provide support on specific local issues related to the provision of the DRS Service to agreed national standards.
- 9. To develop the reporting capabilities with regards to daily management activities and provide bespoke reporting and research capabilities from the data held by the DRS Collaborative.
- 10. To utilise and make use of alternative methods of communication within the collaborative to minimise cost, reduce travel and make most efficient use of staff time.

Mike Black DRS Collaborative Coordinator NHS Highland March 2011

Progress against these objectives

The following table summarises the progress against these objectives over the 12 month period to April 2012.

Objective 1. To have robust and secure IT systems to support the requirements of the diabetic retinopathy screening Programme. In the coming year we will prepare and tender for a national system replacement. It is anticipated that a supplier will need to be contracted before year end (April 2012). The current Siemens Soarian system is due for replacement in Sept 2012.

Current Status

The current contract with Siemens UK in regards to the Soarian system is due to expire in Sep 2012. A Statement of Requirement (SOR) document was drafted by the Collaborative and was ready for July 2011. The Collaborative are continuing to work in conjunction with NSD to explore the options post Sept 2012. As we progress through a possible re-tender process the Soarian system is current in a change freeze. The collaborative will need to focus on the requirements of any new system proposed and the steps needed in order to deliver any new screening system to the Health Boards. As of late April 2012 the contract for system replacement has still not been signed although agreement has been reached to continue with Soarian for a period of a few years. Details are yet to be finalised

Bug and hot-fixes have been applied to the Soarian system by Siemens to correct errors and these have all been successful. A correction to the 'post code' on patient letters has reduced extra postal charges for some boards that were being charged for incorrect format of codes.

There continues to be some instances of incorrect patient suspension messages which are passed from SCI-DC. The collaborative are working closely with SCI-DC to identify and correct these errors which are created as a result of the complex interactions within SCI-DC and other third party systems such as GP practise or clinical systems. These can supply contradicting diabetes diagnosis data which can then suspend or unsuspended patients. Service managers are closely monitoring this problem and in conjunction with the system specialist correct the patient's status to ensure screening takes place as appropriate.

In May 2011 we successfully moved all of the Soarian image data from Tier 1 storage to Tier 3 storage within the ATOS data centre. This move was finally completed after several attempts over weekends and caused no disruption to the service. The results were savings to the NHS in the order of £170k per annum with no discernable performance difference to Soarian users.

In July 2011 it was noticed that all of the computer security certificates for Soarian users were about to imminently expire. The System specialist and ATOS were able in a very short period of time to successfully install new security certificates to all Soarian users across Scotland and thereby prevent a major disruption to the system.

By late April 2012 there had been over 25 outages of the Soarian system since Jan 2012. These outages results in the Soarian system halting during the day and in particular when there is high activity. This was due to the Java programming language being unable to cope with increasing loads placed upon the 'Java heap' which deals with completed processes within Soarian. The Java system has a 1MB addressing capability so a more up to date version of Java may be required. At the time of writing investigations were ongoing by Siemens Germany and ATOS to correct the problem. The system can be recovered within a short period of time however this causes great upheaval to patients and staff alike.

2. To ensure that Key Performance Indicators (KPIs) are available and used to monitor the performance of DRS in Scotland. During the coming year the reporting of the uptake and performance of the DRS Service will be by using the definitive KPIs across Scotland.

The KPI system is now being used as the reporting system for the DRS Collaborative as of 1st April 2011. The performance reports for Q4 2011 are included as a table below.

The KPI system has shown that the previous reporting methodology which used a SCI-DC derived 'total population' as a denominator was not accurate. As the SCI-DC denominator was smaller that the Soarian 'total population' our previous calculations produced optimistic results. A series of audits were carried out with NHS Tayside and NHS Highland in order to understand why SCI-DC diabetic populations are reported as being smaller that those on Soarian. Once the different reporting methodologies and exclusions were understood, Soarian and SCI-DC could be shown to be within 0.5% of each other at any

| Objective | Current Status |
|---|--|
| | time. The result of this was that for 2010 performance statistics we reported a total population of 238,383 (based on SCI-DC information). On Soarian there was a reported total population of 252,534 (on the same day as the SCI-DC reports). When we subtracted our suspensions (based from Soarian reports) we subtracted these from the SCI-DC total population. This resulted in optimistic reporting using the previous report methodology. |
| | Now that we are using KPI reporting we are using both denominator and numerator from Soarian. With the proper patient cohorts being subtracted or suspended from both top and bottom of our calculation we have a more accurate reporting method. However this has produced what appear to be more pessimistic outcomes than those previously reported. At the DRS Board Coordinators meeting 31 st Aug 2011 it was also discussed and agreed that KPI 3 (Successful Screening) was not an accurate reflection of overall performance as required by the QIS standards 2004 Para 2(a) 3. This standard states that - 'A minimum of 80% of eligible people with diabetes are screened within the last year'. The Board Coordinators agreed that the DRS service could not account for the outcome of a screening episode with regards to it being successful as patient pathology was a major factor. Also DRS have no control of results delivery from an Ophthalmology referral and DRS need a 'result' in order to have a 'successful screening'. Other national screening programmes are measured by 'Uptake rate' and in order to align ourselves with these programmes it was decided that we should report KPI 2 (Uptake rate) as our prime performance indicator. We would also continue to report KPI 3 (Successful screening). This decision was ratified by the DRS Executive at their meeting 9 th Sept 2011. |
| | It should be noted that the current throughput of patients on an annual basis has not significantly changed and that DRS 'performance' has not reduced; only the reporting methodology has changed. Total diabetic patient numbers continue to increase at approximately 5% per annum. |
| | KPIs have proved to be very accurate for DRS purposes and are useful for reporting success as well as failure. Service managers are being encouraged to use these tools for continuous monitoring of performance and to help drive through change and efficiency in delivery of services. |
| 3. To maintain a national EQA programme with a bi-annual cycle to be undertaken by all graders in Scotland and to develop our policies for EQA. | The Collaborative continues to work in partnership with Aberdeen University who have developed comprehensive advanced software that will capture grading data for the external quality assurance programme. We carried out 2 successful rounds in Spring and Autumn of 2010 with 2 further rounds in 2011. These Spring and Autumn 2011 EQA rounds will use new sets of 100 retinal images for each round selected by the DRS Lead Clinician from Soarian. |
| | The Spring 2011 round had a 98% uptake of graders from around Scotland and was undertaken from 18 th April until 18 th May. The outcome was reported to the DRS Lead Clinician and 2 individual graders were identified as significantly underperforming in this round. The board areas concerned were informed and an action plan was drawn up in consultation with those boards. The performance reviews subsequently carried out showed that there was no risk to patients and the individuals concerned were offered education and training. The overall result was that grading centre's continue to perform to a high and equitable standard. The policy for EQA continues to be developed and the action plan used for the Spring 2011 reviews will be developed and included as part of the DRS policy for EQA. |
| | The Autumn round was undertaken from 12 th Sept until the 7 th Oct with a 98% uptake. This round showed a significant increase in performance with another tightening of the grouping of all boards as shown in Annex B to this report. |
| | The lessons learned from each round are promulgated prior to the subsequent round and these form an important part of the educational and quality improvement aspect of EQA. The EQA programme is a high priority for the DRS collaborative and will |

| Objective | Current Status |
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| | need to be supported. We will continue with the ongoing development of an EQA programme to meet the needs of the Four Nations working group. |
| | A paper by Dr K Goatman (Aberdeen University) on the "EQA for image grading in the Scottish Diabetic Retinopathy Screening Programme" was recently published in the Diabetic Medicine Journal (DME-2011-00339) |
| | A demonstration of the Scottish DRSP EQA system can be seen at http://www.abdn.ac.uk/eqa (username: demo password: test) |
| 4. To ensure that the screening programme meets the requirements of NHS QIS for Training and Accreditation of Staff. The collaborative will continue to facilitate the City and Guilds certification in Scotland and implement the Slit Lamp Examiners | We continue to facilitate the registration and accreditation of staff through the City &Guild level 3 Certificates and the Diploma in Diabetic Retinopathy Screening. There continues to be challenges in having a fully accredited workforce and the DRS collaborative continue to strongly encourage staff to complete the academic requirements. NHS Lanarkshire should be congratulated on being the first Health Board to have all of their staff complete the C&G accreditation in 2011. Closing dates for some units were announced for June 1 st 2012. Staff will need to complete these already funded units prior to this date. |
| training and accreditation scheme for the Diabetic Retinopathy Screening Programme. | The Collaborative have developed and approved a national standard for the training and accreditation of slit lamp examiners (SLE). Significant challenges remain in accreditation of SLE in remote and rural areas especially where there is no grading centre present. Discussion and debate continues about the high standards that have been set and how they can be achieved for all SLE across Scotland. In recognition of the commitment of staff members in achieving Slit Lamp Examiner status the DRS collaborative will issue accreditation certificates. |
| 5. To maintain communication within the collaborative. The DRS Collaborative will organise a DRS management group conference and In-Service training day for | Ongoing communication is maintained through the regular meetings of the 4 sub-groups and the Executive as well as regional meetings where appropriate. There is regular communication with all health boards and the IT systems suppliers on the IT Issues and this is mostly conducted via e-mail and teleconference. |
| all staff in November. Ongoing collaborative management meetings will continue to be held on a quarterly basis. | The DRS collaborative held a National Conference for all 5 management groups on the 9th Nov. This meeting allowed the management groups to work together in a collaborative way and focus on Autograding, EQA and KPI topics that are of concern for all management groups. This combined conference replaced all of the normal third quarter management group meetings usually held in November. A report on the outcomes of this day is attached as Annex I to this report. |
| | The DRS Collaborative held a national DRS Study day on 10th November in Perth Concert hall. The outcome report for the day is attached as Annex J to this report. It was agreed by the DRS executive that the In-service days will take part on a 2 yearly cycle in order to keep the training fresh and reduce pressure on budgets and staff. |
| | The collaborative also maintains a website www.ndrs.scot.nhs.uk . The DRS website is in need of overall and updating and at time of writing this was being undertaken by http://www.polarisdesign.co.uk from Forres. |
| | A web conferencing system (BT NHS Web conferencing) has been used successfully for the IT user group and the use of this will be extended for the Lead clinicians to review images post EQA. This will minimise time away from clinical duties and allow high participation. Where possible this will also be used for short life working groups to maximise efficiency. |
| 6. To coordinate work in Scotland to develop the screening programme. We will implement a national first level | The Collaborative were successful in the business case made to NSD and the Public Health Portfolio Management Group (PHPMG) for the funding of a national automated level 1 grading system. The system was installed on a virtual hardware platform based in the ATOS data centre in Aug –Sept 2011. There have been some delays in getting the system launched |
| Dielestie Detiesestles Courseies Dussus | Annual Danat 2014 2010 |

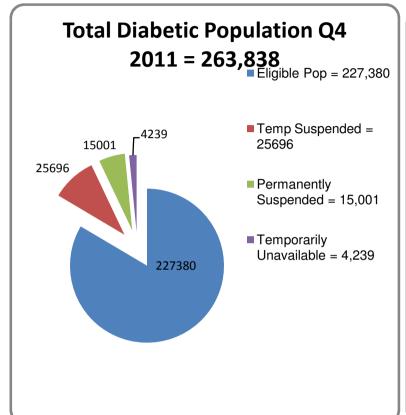
| Ohioatina | Command Status |
|--|---|
| Objective | Current Status |
| automated grading system through computerised image analysis. The system will be available at no cost for an initial 12 month period. | nationally as technical problems are overcome and security/firewall changes are made across the 8 health boards that host grading centres. It is hoped that the system will be on-line by the end of Oct 2011. Additional hardware will need to be added to the system to realise the full potential and to get the system using all 4 processing algorithms available to us. Currently with one algorithm the system can cope with 43,800 episodes (or 87,600 images) per annum. With all four algorithms running the system should be able to process 175,200 episodes (or 350,400 images) per annum. (Based on a 20 hr per day availability with 2 eyes per episode). The autograding system will be a very welcome boost to DRS grading capacity as the diabetic population continues to rise and will provide a cost effective method of carry out this necessary work. The auto-grader participates in both Internal and External Quality assurance. |
| | The L1 auto-grader system has shown to be a viable national addition to the Soarian system. There are however concerns regarding its use and the inability of the grader to report both on maculopathy and other eye pathologies. Lengthy discussion and debate have taken place at all management group meetings during the first quarter of 2012 regarding its use with some boards keen to use it and others no so. Questions remain about the core requirements of a DRS screening programme to screen for sight threatening diabetic retinopathy and the current opportunistic ability to also report on maculopathy and other eye pathologies. On going funding is being sought for the auto-grader with boards having to find funding for an equitable share. While some boards are ready to adopt the system immediately other may not be and this has thrown the business case and viability of the system into question. Ongoing discussion continues at the time of writing. |
| 7. To investigate and develop opportunities of electronic communications with patients and care providers in order to minimise the need for letter production from the Soarian | The system specialist (Neville Lee) has been working in conjunction with his other eHealth colleagues from boards to develop methods of communication to patients via electronic means such as SMS and email. NHS Fife is about to trial a Voice Messaging system called Telephonetics VIP and we will provide Comma Separated Variable (CSV) data files from Soarian. We will develop this in conjunction with NHS Fife and monitor how this might help reduce DNA rates. |
| system and to help reduce DNA rates for patients. | We are also working with the 'My Diabetes-My Way' patient portal team from SCI-DC to merge our results with other diabetes data. The system has so far shown great promise and the limited number of patients who are currently piloting this system can access all of their DRS results and letters on-line via this portal. We believe this will become an important and vital part of any future development of the DRS system. Ongoing development is required and being undertaken prior to developing a business case. |
| | The system specialist has also been developing the skills to access and amend the letter creation component of the Soarian system. This will allow us to amend and change some features and text of the patient and GP letters. This will give a significant capability which has been missing in the past and will also help reduce some patient complaints regarding wording. |
| | The system specialist can now also create re-conciliation reports from the Soarian system which in conjunction with SCI-Diabetes colleagues will allow service managers to correct and deal with data errors on both systems. These reports are a significant enhancement in ensuring we have high quality of data and improve overall confidence in the DRS programme. |
| 8. The Lead Clinician, Coordinator and IT system specialist are to visit each Health Board area and meet with DRS teams in order to discuss and provide support on | Visits have been carried out to NHS Grampian, NHS Tayside and NHS Greater Glasgow. Further visits to Health Board areas are planned for the remainder of this year and will be undertaken when the opportunity arises. It is likely that all of the Health Boards won't be visited prior to the end of the business year and these visits will therefore be carried into 2012 -2013. Its anticipated that a series of regular visits be undertaken on a rolling basis across Scotland. |
| Bill ii Bii ii Cara | underplaced that a series of regular visits of undertaken on a rouning obsess develops because. |

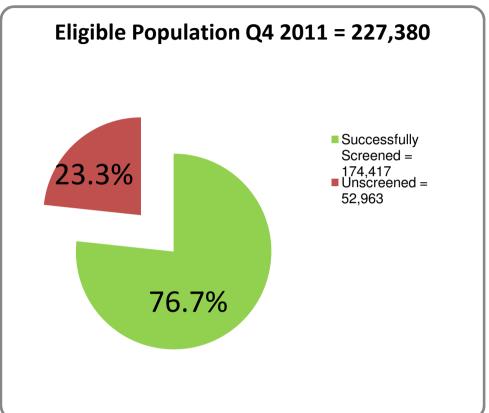
| Objective | Current Status |
|---|---|
| specific local issues related to the provision of the DRS Service to agreed national standards. | |
| 9. To develop the reporting capabilities with regards to daily management activities and provide bespoke reporting and research capabilities from the data held by the DRS Collaborative. | The Collaborative have a full time system specialist (Neville Lee) and part of his role is to enable and develop bespoke reporting capabilities in Soarian. These reports have been crucial in reducing the dependence on support from the software supplier in confirming and correcting Soarian problems. They have also allowed us to confirm that system or software changes undertaken by suppliers such as Siemens and SCI-DC are carried out with high confidence. |
| neid ey die Bris condoranve. | There have been two research projects undertaken on Diabetes in Scotland by the Universities of Dundee and Aberdeen and we have significantly contributed to these important activities which we were previously not able to do. The data contained within 5 years of national screening records is a valuable and rich resource for researchers to interpret. |
| | The system specialist continues to develop procedures and processes along with the relevant safeguards to protect DRS data and ensure we comply with the Data Protection Act. Some limited ah-hoc reporting is able to be provided on request to DRS managers and Health Boards. |
| 10. To utilise and make use of alternative | The Collaborative use the NHS BT Web-conferencing system and BT Meet Me tools to facilitate desktop conferencing and |
| methods of communication within the | teleconference meetings where possible. These have been successfully used this year in place of face to face meetings for the IT |
| collaborative to minimise cost, reduce | Users Group and to allow the Lead clinicians to review the outcome report for each of the EQA rounds. These tools make best |
| travel and make most efficient use of staff | use of time and reduce travel as well as cost. The Collaborative also make best use of traditional VC and teleconference |
| time. | facilities where available. |

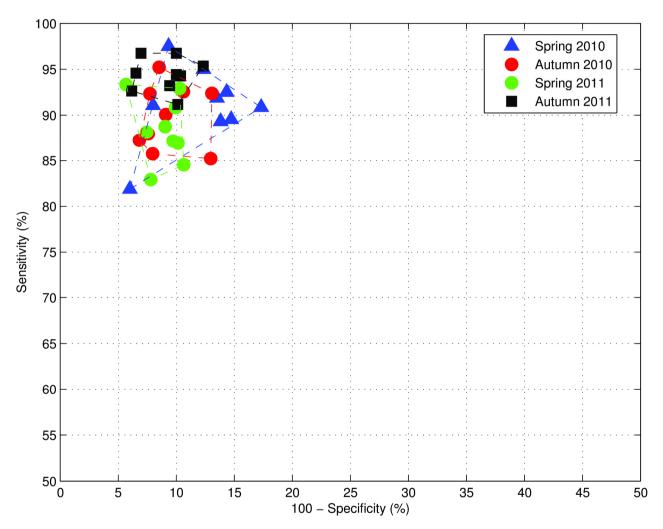
Annex A Key Performance Statistics for 2011

| DRSP Key performance report for Q4 2011 as at 01 April 2012. (All patient numbers are taken from Soarian) | | |
|--|-----------|-------|
| Start date | 31-Mar-11 | |
| Reference date | 01-Apr-12 | |
| Total Diabetic Population aged 12 and over on Soarian (KPI 0) | 263,838 | |
| Total number of people who are permanently suspended (KPI 0) | 15,001 | |
| Total number of people who are temporarily suspended (KPI 0) | 25,696 | |
| Eligible population as at 01 April 2012 (KPI 0) | 227,380 | |
| Number of individuals attending at least once (KPI 2) | 180,431 | 79.4% |
| Total number of the current eligible population successfully screened (KPI 4) | 174,417 | 76.7% |
| Remaining population not suspended or screened | 52,963 | 23.3% |
| Number of referrals to opthalmology on account of Retinopathy (KPI 13) | 6,547 | 3.5% |

Annex A







Receiver operator characteristic (ROC) plot showing the change in centre sensitivity/specificity for centres between the 2008 pilot study, 2010 Spring EQA and 2011 Spring and Autumn EQA rounds. This report was provided by Dr Keith Goatman – Aberdeen University.

Annex C
Financial report for 2011 DRS Collaborative

Details for NSD return re Financial year 2011-2012

Diabetic Retinopathy Screening Collaborative Budget Report Year Ended 31st March 2012 National Services Division

| | Budge £ | Actual YTD £ | Variance £ | |
|---------------------------------|------------|-----------------|---------------|--|
| Salaries & Wages | | | | |
| Lead Clinician | 19920 | 19920 | 0 | Dr Ken Swa (Paid direct by NSD) |
| Admin Support [Band 4] | 850 | 850 | 0 | Mairi MacLeod admin support |
| IT Systems Specialist | 41373 | 41373 | 0 | Neville |
| Co-ordinator [Band 7] | 47002 | 47002 | 0 | Mike |
| Education & Training | 4500 | 4500 | 0 | Tayside SLA |
| Supplies & Services | | | | |
| Computer/Office Equipment | 1062 | 1076 | -14 | |
| Stationery/Printing Supplies | 34 | 34 | 0 | |
| Travel Expenses | 6231 | 6231 | 0 | |
| Facilities Booking | 4841 | 4851 | -10 | |
| Training Materials & Events | 1758 | 1758 | 0 | |
| External Quality Assurance | 6000 | 6000 | 0 | |
| 4 Nations research contribution | 5000 | 5000 | 0 | |
| Agreed adj at year-end re | | | | |
| u/spend | 2709 | 2709 | 0 | |
| | | | | this final position overspend absorbed in SE CHP |
| Total Expenditure | 141280 | 141304 | -24 | position |

Report provided by M MacGilp – South & Mid unit finance department - NHS Highland.

Annex D

Annual Training Report 2011

| Health Board | Optoms registered | Passed unit credits * | Screener/ graders registered | Diploma award attained | Admin registered | Units passed | Units or Diploma award not attained but should be attained by September 2012 | SL examiner probationer | SL award attained |
|------------------------|-------------------|-----------------------------|------------------------------------|------------------------------|------------------|-----------------|---|-------------------------|----------------------|
| Ayrshire & Arran | 32 | 9 | 3 | 3 | 2 | 0 | 24 | 0 | 0 |
| Dumfries & Galloway | Not used | | 1 | 0 | 0 | 0 | 0 | 1 | 0 |
| Fife | Not used | | 4 | 4 | 2 | 0 | 2 | 2 | 1 |
| Forth Valley | 2 | 1 | 7 | 0 | 1 | 0 | 9 | 0 | 1 |
| Glasgow | 5 | 1 | 11 | 5 | 4 | 0 | 19 | 0 | 0 |
| Grampian | Not used | | 5 | 0 | 0 | 0 | 4 | 0 | 0 |
| Highland | 14 | 14 | 3 | 3 | 1 | 1 | 0 | 0 | 0 |
| Lanarkshire | Not used | | 6 | 6 | 0 | 0 | 0 | 2 | 0 |
| Lothian | Not used | | 12 | 1 | 1 | 0 | 16 | 0 | 0 |
| Orkney | Not used | | | | 1 | 0 | 1 | NA | NA |
| Shetland | Not used | | 0 | 0 | 1 | 0 | 1 | NA | NA |
| Tayside | Not used | | 5 | 2 | 1 | 1 | 3 | 1 | 1 |
| Western Isles | 1 | | 2 | 0 | 1 | 1 | 3 | NA | NA |

^{*}Please note: Optometrists are exempt form several units and therefore are accredited with units when attained

Items to note

- There has been a slight increase this year in the numbers of Optometrists within the DRS who have attained City and Guild units.
- Six candidates are probationer Slit Lamp Examiners and three have attained the full Slit Lamp Accreditation Award.
- It has become a priority to ensure all those undertaking Slit Lamp examinations, especially Screeners, attain the Slit Lamp Accreditation Award. All Service Managers have been urged to ensure their staff undertakes the Award.

The Training Coordinator has informed all Service Managers that City & Guilds registrations are valid for 3 years. In September 2009 the existing DRS Certificate was upgraded to the new DRS Qualifications and all candidates already registered were given the opportunity to transfer (free of charge) to the new qualification and at that point their registrations were extended another 3 years. **The end date for these registrations is 1**st **September 2012. All of the candidates registered via the Scottish Diabetes Collaborative are included.** Any candidate who falls into this category must send their assessed units in the completed format to the Administration centre by **1**st **June 2012**. This is to allow time for units to be internally verified and certificated.

Any Candidate who does not complete by the deadline date will need to re-register with City and Guilds at additional cost to either the Screening Programme or themselves.

| 1. Programme Information | 1. Programme Information | | | | | | | | |
|------------------------------------|---|---|--|--|--|--|--|--|--|
| 1.1 Health Board Name | Ayrshire & Arran | Borders | Dumfries & Galloway | Forth Valley | Fife | | | | |
| 1.2 Programme Board Coordinator | Dr James McHardy, Consultant in Public Health Medicine, Afton House, Ailsa Hospital, Jim.Mchardy@aapct.scot.nhs.uk, Tel 01292 515866 | Dr. Tim Patterson Consultant in Public Health Medicine Newstead Melrose TD6 9DA 01896 825517 Tim.patterson@borders.scot.nhs.uk | Dr David Breen, DRS Board co- ordinator Tel: 01387 272 724 email: david.breen@nhs.net | Dr Rani Balendra, Consultant in Public Health Medicine, Carseview House, Stirling, 01786 457262/290. rani.balendra@nhs.net | Dr Charles Saunders , DRS Board Co-ordinator Email: charles.saunders@nhs.net | | | | |
| 1.3 Accountable | Dr Mohan Varikkara, Consultant Ophthalmologist | Dr. Ken Swa Ken.swa@luht.scot.nhs.uk | Dr Brian Power, DRS Service Lead Clinician | Dr John Doig. John.doig@nhs.net 01324 624000 | Dr Caroline Styles, DRS Lead Clinician | | | | |
| clinical lead | Mohan. Varikarra@aaaht.scot.nhs.uk, Tel 01563 527040 | 07785370242 | Tel: 01387 246246 email: brian.power@nhs.net | | Telephone: 01592 623623 ext 3853. Email: caroline.styles@nhs.net | | | | |
| 1.4 Service Manager | Diane Smith, Diabetes MCN Manager/Retinal Screening Facilitator, diane.smith@aapet.scot.nhs.uk, Tel 01294 323470 | Ms Norah Grant DRS Service Manager E3, PAEP, Chalmers Street Edinburgh EH3 9HA Norah grant@luht.scot.nhs.uk 0131 536 3928 | Jane Carrick, DRS Service Manager Tel: 01387 244310 email: jane.carrick@nhs.net | Lorraine Fowler, Diabetes Systems Administrator, Stirling Royal Infirmary, Livilands Gate, Stirling, FK8 2AU. Lorraine.fowler@nhs.net . 01786 434169. | Karen Gibb, Service Manager Telephone: 01592 653334 Email: karengibb@nhs.net | | | | |
| 1.5 Location | Room 745, 2 nd Floor, Administration Building, Ayrshire Central Hospital, Kilwinning Road, Irvine KA12 8SS | DRS Service E3, PAEP, Chalmers Street Edinburgh EH3 9HA 0131 536 4145 | Diabetic Retinopathy Screening Service, Cairnsmore East, Crichton Hall, Bankend Road, Dumfries DG1 4TG Tel: 01387 244228 email: craig.mccallay@nhs.net or Tel: 01387 244325 email: kym.cowan@nhs.net | Diabetes Unit, Stirling Royal Infirmary, Livilands Gate, Stirling, FK8 2AU. 01786 434169. Falkirk Royal Infirmary, Hut 8, Westburn Avenue, Falkirk – 01324 624000 ext 5735. | NHS FIFE DIABETIC RETINOPATHY SERVICE, Ward 8, Cameron Hospital, Windygates, Fife, KY8 5RRk. Tel: 01592 226852 | | | | |
| 1.6 Referral Centres | Ayr Hospital, Crosshouse Hospital, Inverclyde Royal Hospital, | Eye Centre, Borders General Hospital (BGH) | Ophthalmology Department, D&G Royal Infirmary, Bankend Road, Dumfries DG1 4AP Tel: 01387 246246 Ophthalmology Department, Galloway Community Hospital, Stranraer DG9 7HX Tel: 01776 707707 Ophthalmology Department, 4 Warrell Drive, Rosehill, Carlisle Tel: 01228 602780 or 01228 814366 | Ophthalmology Dept, Stirling Royal Infirmary, Livilands Gate, Stirling, FK8 2AU. OCT Clinic – Ophthalmology Day Unit, Falkirk Royal Infirmary, Westburn Avenue, Falkirk. | Queen Margaret Hospital, Whitefield Road, Dunfermline,KY12 0SU Victoria Hospital, Hayfield Road, Kirkcaldy,KY2 5AH Ninewells Hospital, Dundee, DD1 9SY | | | | |
| 1.7 Biomicroscopy arrangements | Slit lamp examination carried out by all accredited Optometrists at 25 Optometry Practices immediately following photograph. If screening is deemed ungradable at the Diabetic Clinics, patients are sent an invitation to make an appointment with an accredited Optometrist for biomicroscopy | Either an appointment is made for them in a slit lamp clinic at the BGH or they are asked to make an appointment with a local optometrist, choosing from a list of participating optometrists provided. | 4 static sites 3 of these sites provide a one stop photo +- slit lamp bio microscopy same day appt 1 static site and mobile service patients require a second appointment for bio microscopy. Appt usually within 4 weeks as there is a clinic first Thursday of the month. | Patients with un-gradable or unobtainable images following camera screening are examined in a slit lamp clinic. There are four slit lamp clinics per week in NHS Forth Valley. Three clinics are held in Falkirk Royal Infirmary, Retinal Screening Dept, Hut 8, Westburn | 3 slit lamp site across fife patients are referred according to area | | | | |

| | | | | Avenue, Falkirk and one other clinic held in Stirling Royal Infirmary, Livilands Gate, Stirling., | |
|---------------------|----|----|----|---|----|
| 1.8 Health Board GP | 59 | 25 | 35 | 57 | 57 |
| Practices | | | | | |
| 1.9 Screening GP | 60 | | 35 | 57 | 57 |
| Practices | | 25 | | | |

| | Ayrshire & Arran | Borders | Dumfries & Galloway | Forth Valley | Fife |
|--------------------------------|---|--|--|--|--|
| 2.1 Programme structure/ model | Patients are invited to make an appointment for screening when their recall date is imminent. They are sent an invitation letter and list of Opticians including the hospital sites to choose from. 25 Optometry Practices providing digital screening and Biomicroscopy. 2 Hospital sites providing digital screening. External Agencies, Visioncall, Healthcall, First Sight Opticians and W Aitchison Opticians all carry out Domiciliary visits only. JR Shaw Optometrists carry out Slit Lamp examinations at HMP Bowhouse | The programme is delivered using 1 mobile camera visiting various GP practices and NHS Borders premises. There is also a pilot underway using 3 optician practices for image capture. Slit lamp bio-microscopy is done by an ophthalmologist at the BGH or one of 17 community optometrists throughout the Borders. The optometrists are being used on a short term basis to help with a backlog. | Brief summary of how screening is delivered, including: - number of photographic static sites - 4, (2 within optometrists, 2 within hospital bases) - mobile – 1 van covering 21 G.P. practices, - optometric sites – 2- one in Dumfries and one in Newton Stewart - number of bio microscopy sites – 3 one in Dumfries, one in Stranraer and one in Newton Stewart - whether any independent/external provider is used – yes 2 optometrists in static sites within their own premises | People with diabetes within Forth Valley are invited to attend an annual retinal screening examination from the age of 12 onwards. There are 2 static photographic sites – Stirling Royal Infirmary which has the capacity to screen 102 patients per week and Falkirk Royal Infirmary which has the capacity to screen 150 patients per week. Forth Valley has 4 slit lamp clinics with the capacity to examine 60 patients per week. There is no mobile service within Forth Valley. | Fundus Photography The service has fixed cameras at Victoria and Queen Margaret Hospitals and a mobile camera which visits 11 further locations Fife At each of the Fixed sites 3- patients are appointed a day and 28 patients appointed at a mobile on average. At the Victoria Hospital clinics are run 5 days a week, on a Wednesday afternoon no patients are appointed and Thursday morning 3 patients are appointed as we offer a Walk in service for anyone attending their Diabetes annual review Mobile locations are governed by the number of patients due and the availability of rooms as 9 of our locations are within GP surgeries. The images are graded and the results sent out. Biomicroscopy If the patient requires biomicroscopy an appointment is made and sent out requesting the patient attend 1 of the 3 site where we provide biomicroscopy. These are Victoria and Queen Margaret Hospitals plus |

| | | | | | they are recalled there every year rather than Fundus Photography. The only exception to this is when |
|------------------------------|---|---|--|---|--|
| | | | | | they patient are discharged back from ophthalmology. |
| | | | | | Slit lamp examinations where undertaken by a Locum optometrist until November 2009 through a service contract arrangement. Since then this is being undertaken in-house by one of the Level 2 screener/graders with another screener grader currently training. We currently see 20 patients at the Victoria and Queen Margaret Hospitals sites and 16 at Cupar Health Centre |
| 2.2 Cameras Used | 23 Topcon TRCNW6 with Nikon D70S 2 Topcon TRCNW6 with Nikon D80S 1 Topcon TRCNW6 with Nikon D1X 1 Topcon TRCNW200? with Nikon D80S | 1 Canon CR-DGi fundus cameras with Canon EOS 10D digital back. | 5 cameras 3x Topcon TRC NW6S with Nikon D70 1x Topcon TRC NW6S with Nikon D80 1x Cannon CR-DGi with Canon EOS 20D | There are 2 cameras supplied by Topcon – TRC NW6S with Nikon D70 digital camera backs. | 3 x Canon CR-DGI Fundus Camera backs 3 x Canon EOS 20D Digital Camera |
| 2.3 Workforce Information | Patients are invited to make an appointment for screening when their recall date is imminent. They are sent an invitation letter and list of Opticians including the hospital sites to choose from. 25 Optometry Practices providing digital screening and Biomicroscopy. 2 Hospital sites providing digital screening. External Agencies, Visioncall, Healthcall, First Sight Opticians and W Aitchison Opticians all carry out Domiciliary visits only. | 1 Service (Programme) Manager 3.9 Administrators 1 screener 4 Level 1 graders 3.8 level 2 graders 3 level 3 graders working part time I ophthalmologist working 0.2 | Brief summary of workforce to deliver programme administrators - 1 retinal photographers – 4 (3 also L2 graders) graders – 3x L2 + 1x L3 Slit Lamp Examiners – 2 (also screeners/graders L2) | The workforce to deliver retinal screening within Forth Valley includes: 7 Part time retinal photographers 5 Part time administrators 2 Level 1/2 graders 1 Level 3 grader 2 Slit lamp examiners | 1 x Level 3 Grader/SL examiners (Associate Specialist attached to service) 1 x Level 2 grader/SL examiner (Full time) 1 x Screener/Level 2 grader (trainee SL examiner) (Part time) 1 x Screener/Level 1 grader (Full time) 1 x Screener/Level 1 grader (Part time) 1 x Screener (trainee Level 1 grader) 1 x Screener (trainee Level 1 grader) (Full time) 1 x System Administrator (Full Time) 1 x DRS Administrator (30hrs) 1 x Booking clerk (30hrs) |
| 2. Delivery Model | A supplier O A supplier | Day J | Downfolion P. Call | Forth W-U- | Eie. |
| | Ayrshire & Arran | Borders | Dumfries & Galloway | Forth Valley | Fife |

| 2.4 Retinal Screeners | | Full/part | Units comp | eted | 1.0 screener nil accredited | A – current screener, full time, passed | | Current |
|-----------------------|----------------------|--------------|-------------|------|-----------------------------------|---|---|--|
| 2.4 Keunai Screeners | | time | Omis comp | cieu | 3 community optometrists P/T nil | units 301,302,304,305 & 306 and has | Screener 1 – Current, part-time – | 1 x Full time Screener pass |
| | Optom 1 | Part | | | accreditation | 303 ready to mark with online exam | Units 301 & 302 completed and | 304, 305, 306 |
| | Optom 2 | Part | | | decreaturon | proposed to take on 12/05/2010 | passed. | 1 x Full time Screener, pass |
| | Optom 3 | Part | | | All the above staff is current. | proposed to take on 12/05/2010 | Passea | 304, Commenced July 09 |
| | Optom 4 | Full | | | | | Screener 2 – Current, part-time – | 2 x Part Time Screener pass |
| | Optom 5 | Full | | | | | Units 301 & 302 completed and | 304, 305, 306 |
| | Optom 6 | Full | | | | | passed. | 1 x Full time Screener, Not |
| | Optom 7 | Full | | | | | | started C&G, Commenced |
| | Optom 8 | Full | | | | | Screener 3 – Current, part-time – | Jan 10 |
| | Optom 9 | Full | | | | | Unit 301 completed and passed. | |
| | Optom 10 | Part | | | | | | Non-Current |
| | Optom 11 | Full | | | | | Screener 4 – Current, part-time – | 1 x Full Time Screener, pass |
| | Optom 12 | Part | | | | | Units 301 & 302 completed and passed. | 304, 305, left July 09 1 x Full time Screener Not |
| | Optom 13 | Full | | | | | passed. | started C&G, was on long |
| | Optom 14 | Full | 306, 307,30 | 3 | | | Screener 5 – Current, part-time – | term sick left June 09 |
| | Optom 15 | Full | , , | | | | No C& G units completed. | term sick fort suite 05 |
| | Optom 16 | Full | | | | | 2.1. 200 S anno completed. | |
| | Optom 17 | Part | | | | | Screener 6 – Current, part-time – | |
| | Optom 18 | Full | | | | | Units 301, 302 & 304 completed | |
| | Optom 19 | Part | | | | | and passed. | |
| | Optom 20 | Full | | | | | | |
| | Optom 21 | Full | | | | | Screener 7 - Current, part-time – | |
| | Optom 22 | Part | | | | | No C & G units completed | |
| | Optom 23 | Part | | | | | | |
| | Optom 24 | Full | | | | | | |
| | Optom 25 | Part | | | | | | |
| | Optom 26 | Part | | | | | | |
| | Optom 27 | Part | | | | | | |
| | Optom 28 | Full | | | | | | |
| | Optom 29 | Part | | | | | | |
| | Optom 30 | Full | | | | | | |
| | Optom 31 | Part Full | | | | | | |
| | Optom 32 Optom 33 | Full | | | | | | |
| | Optom 34 | Full | | | | | | |
| | Optom 35 | Full | | | | | | |
| | Optom 36 | Full | | | | | | |
| | Photo 1 | Part | | | | | | |
| | Photo 2 | Full | | | | | | |
| | Photo 3 | Full | | | | | | |
| | Photo 4 | Full | 301,302 | | | | | |
| | | | | | | | | |
| 2.5 Retinopathy | | Full/part | Level Un | ts | | B – current screener/grader L2, part | Grader 1 – Current, part-time – | Current |
| Graders | | time | cor | ıp | 1.0 Level 1 nil C&G accreditation | time, passed Diploma | Units 301,302 & 308 completed | 1 x Level 3 Grader |
| | | Part | L1 | | 1.0 Level 1 nil C&G accreditation | C - current screener/grader L2, part time, | and passed. | (Associate Specialist |
| | | | L1 | | 1.0 Level 1 nil C&G accreditation | passed Diploma | Candon 2 Commont and time N | attached to service) |
| | | | L1 | | 1.0 Level 1 nil C&G accreditation | D – current screener/grader L2, part time, passed unit 306 still to undertake | Grader 2 – Current, part-time – No C & G Units completed. | 1 x Full time Level 2 Grader pass 303, 307, 308 |
| | | Full | L1 | | 0.6 Level2 nil C&G accreditation | units 307 & 308 | C & G Office Completed. | 1 x Part Time Level 2 |
| | Optom 5 | Full | L1 | | 5.5 Ecvel2 in ecco accreditation | uma 307 & 300 | | 1 X 1 art 1 mic Level 2 |

| Г | | | | 1 | L + 0.7 12 20.4 | | | |
|---------------|--------------|------|---------|---------|---|--|-----------------------------------|---|
| | Optom 6 | Full | L1 | | 1.0 Level2 306 | | Grader 3 – Current, part-time - C | Grader pass 303, 307, 308 |
| | Optom 7 | Full | L1 | | 1.0 Level2 nil C&G accreditation | | & G not required. | 1 x Part Time Level 1 |
| | Optom 8 | Full | L1 | | 1.0 Level2 306 | | | Grader pass 303, 307, 308 |
| | Optom 9 | Full | L1 | | 0.2 Level2 nil accreditation | | | 1 x Full time Level 1 Grader, |
| | Optom 10 | Part | L1 | | 0.1 Level2 nil accreditation no longer | | | Commenced July 09 |
| | Optom 11 | Full | L1 | | employed | | | 1 x Full time Level 2 Grader, |
| | Optom 12 | Part | L1 | | | | | Just started Grading |
| | Optom 13 | Full | L1 | | 3 x level 3; P/T, ophthalmologists | | | Training, Commenced Jan |
| | Optom 14 | Full | L1 | 306,307 | 3 x level 3, F/1, opilulalillologists | | | 10 |
| | | | L2 | 308 | All of the above staff members are | | | Non-Current |
| | Optom 15 | Full | L1 | | current and shared with Lothian unless | | | 1 x Full time Screener No |
| | Optom 16 | Full | L1 | | otherwise stated. | | | C&G, was on long term sick |
| | Optom 17 | Part | L1 | | other wise stated. | | | left June 09 |
| | Optom 18 | Full | L1 | | | | | 1 x Full Time Screener, pass |
| | Optom 19 | Part | L1 | | | | | 303, 307, 308, left July 09 |
| | Optom 20 | Full | L1 | | | | | 1 x Service Contract |
| | | | L2 | | | | | agreement with qualified |
| | Optom 21 | Full | L1 | | | | | optometrist Nov 09 |
| | Optom 22 | Part | L1 | | | | | - |
| | Optom 23 | Part | L1 | | | | | |
| | Optom 24 | Full | L1 | | | | | |
| | Optom 25 | Part | L1 | | | | | |
| | Optom 26 | Part | L1 | | | | | |
| | | | L2 | | | | | |
| | Optom 27 | Part | L1 | | | | | |
| | Optom 28 | Full | L1 | | | | | |
| | Optom 29 | Part | L1 | | | | | |
| | Optom 30 | Full | L1 | | | | | |
| | Optom 31 | Part | L1 | | | | | |
| | Optom 32 | Full | L1 | | | | | |
| | Optom 33 | Full | L1 | | | | | |
| | Optom 34 | Full | L1 | | | | | |
| | Optom 35 | Full | L1 | | | | | |
| | Optom 36 | Full | L1 | | | | | |
| | | | L2 | | | | | |
| | Ophth 1 | Part | L3 | | | | | |
| | Ophth 2 | Part | L3 | | | | | |
| 2.6 Slit Lamp | | U | Jnits | | P/T ophthalmologist 0.2 | C - current screener/grader L2, SLE part | Examiner 1 – Current, part-time – | Current |
| Examiners | | c | omplete | | | time, passed Diploma | Level 1-2 grader, Units 301,302 & | 1 x Level 3 Grader |
| Laminus | Optom 1 | Part | | | 17 P/T community optometrists | D – current screener/grader L2, SLE part | 308 completed and passed. | (Associate Specialist |
| | Optom 2 | Part | | | None of the above perform grading or | time, passed unit 306 still to undertake | | attached to service) |
| | Optom 3 | Part | | | are undertaking C&Gs. Ths optometrists | units 307 & 308 | Examiner 2 – Current, part-time – | 1 x Full time Level 2 Grader |
| | Optom 4 | Full | | | are being used to address a backlog and | | Level 1-2 grader, no C & G units | pass 303, 304, 305, 307, 308 |
| | Optom 5 | Full | | | are likely to a temporary solution. | | completed. | 1 x Part Time Level 2 |
| | Optom 6 | Full | | | | | | Grader pass 303, 304, 305, |
| | Optom 7 | Full | | | | | | 307, 308 (started training in Dec 2010) |
| | Optom 8 | Full | | | | | | Dec 2010) |
| | Optom 9 | Full | | | | | | Non-Current |
| | Optom 10 | Part | | | | | | Nov 09 |
| | Optom 11 | Full | | | | | | 1 x Service Contract |
| | Optom 12 | Part | | | | | | agreement with qualified |
| | | |) | · | | 00 | <u> </u> | agreement with quantited |

| | Optom 13 Full | | | | optometrist left Nov 09 |
|------------------|------------------------|----|----|----|-------------------------|
| | Optom 14 Full 306,307, | | | | _ |
| | 308 | | | | |
| | Optom 15 Full | | | | |
| | Optom 16 Full | | | | |
| | Optom 17 Part | | | | |
| | Optom 18 Full | | | | |
| | Optom 19 Part | | | | |
| | Optom 20 Full | | | | |
| | Optom 21 Full | | | | |
| | Optom 22 Part | | | | |
| | Optom 23 Part | | | | |
| | Optom 24 Full | | | | |
| | Optom 25 Part | | | | |
| | Optom 26 Part | | | | |
| | Optom 27 Part | | | | |
| | Optom 28 Full | | | | |
| | Optom 29 Part | | | | |
| | Optom 30 Full | | | | |
| | Optom 31 Part | | | | |
| | Optom 32 Full | | | | |
| | Optom 33 Full | | | | |
| | Optom 34 Full | | | | |
| | Optom 35 Full | | | | |
| | Optom 36 Full | | | | |
| 2.7 Screening GP | 60 | 25 | 35 | 57 | 57 |
| practices | | | | | |

| 1. Programme Inform | 1. Programme Information | | | | | | | | |
|------------------------------------|---|--|--|---|--|--|--|--|--|
| 1.1 Health Board | Grampian | Greater Glasgow | Highland | Lanarkshire | Lothian | | | | |
| Name | | | | | | | | | |
| 1.2 Programme Board Coordinator | Dr Simon Hilton, DRS Board Co- ordinator Summerfield House Aberdeen, Summerfield Rd, Aberdeen AB15 6RE Telephone: 01224 558476 Email: simon.hilton@nhs.net | Dr Emilia Crighton, DRS Board Co- ordinator Telephone: 0141 2014747 Email: emilia.crighton@ggc.scot.nhs.uk | Dr Roderick Harvey DRS Board Co-ordinator, NHS Highland 6th Floor, Raigmore Hospital, Old Perth Road, Inverness IV2 3UJ Email: Roderick.harvey@nhs.net Tel: 01463 705640 | Dr David Cromie Consultant in Public Health Medicine Department of Public Health Department of Public Health, Kirklands, Fallside Road, Bothwell, Glasgow, G71 8BB. 01698 858117 david.cromie@lanarkshire.scot.nhs.uk | Dr. Joy Tomlinson Consultant in Public Health Medicine Deaconess House 148, Pleasance Edinburgh EH8 9RS joy.tomlinson@nhslothian.scot.nhs.uk 0131 536 9162 | | | | |
| 1.3 Accountable clinical lead | Dr John Olson, DRS Service Lead Clinician, David Anderson Building, Foresthill Rd, Aberdeen AB25 2ZP Telephone: 01224 555538. Email: john.olson@nhs.net | Dr William Wykes, DRS Service Lead Clinician Telephone: 0141 201 1582. Email: william.wykes@ggc.scot.nhs.uk | Dr Roderick Harvey, details as above. | Dr Meena Virdi Consultant Ophthalmologist Lead Clinician for Diabetic Screening Hairmyres Hospital Hairmyres East Kilbride Tel: 01355 584652 Meena. Virdi@lanrkshire.scot.nhs.uk | Dr. Karen Madill Karen.madill@nhslothian.scot.nhs.uk E3, PAEP, Chalmers Street Edinburgh EH3 9HA | | | | |

| 1.4 Service Manager 1.5 Location | Margaret Bruce, Retinal Screening Manager, David Anderson Building. Foresterhill Rd Aberdeen AB25 2ZP Telephone: 01224 550198. Email: m.bruce@nhs.net | David Sawers, Retinal Screening Manager Telephone: 0141 211 4754. Email: david.sawers2@ggc.scot.nhs.uk Administrative centre address – | Lisa Steele Service Manager, NHS Highland Diabetic Centre, Centre for Health Science, Old Perth Road, Inverness IV2 3JH Email: lisa.steele@nhs.net Tel: 01463 255946 Diabetic Retinal Screening | Anne Dougan Retinal Screening Team Leader Administration Office Administration Building Coathill Hospital Coathill Coatbridge ML5 4DN 01236 707150 Ann.Dougan2@lanarkshire.scot.nhs.uk Administration Office | Ms Norah Grant DRS Service Manager E3, PAEP, Chalmers Street Edinburgh EH3 9HA Norah.grant@luht.scot.nhs.uk 0131 536 3928 DRS Service |
|-----------------------------------|---|--|---|---|---|
| | Foresterhill Road Aberdeen AB25 2ZP | Screening Department, 1st Floor, Building 2, Templeton Business Centre, 62 Templeton Street, Glasgow G40 1DA | Centre for Health Science Old Perth Road Inverness IV2 3JH Tel: 01463 255938/255939/255940 | Administration Building Coathill Hospital Coathill Coatbridge ML5 4DN 01236 707160 / 0845 337 3341 | E3, PAEP, Chalmers Street Edinburgh EH3 9HA 0131 536 4145 |
| 1.6 Referral Centres | Aberdeen Eye Clinic, Foresterhill Hospital. Dr Grays Hospital Elgin. Chalmers Hospital Banff. Jubilee Hospital Huntly. Turner Hospital Keith. Seafield Hospital Buckie. | Ophthalmology Departments at the following – Glasgow Royal Infirmary, Gartnavel General Hospital Stobhill Hospital, Victoria Infirmary, Southern General Hospital – all in Glasgow Royal Alexandra Hospital, Paisley; Inverclyde Royal Hospital, Greenock; Dumbarton Health Centre | North Highland patients are referred to: Raigmore Hospital Inverness but can be seen at any of the peripheral hospital sites in Golspie, Wick, Fort William and Portree, depending on the nearest venue and treatment required. Argyll & Bute patients are referred to: Campbeltown Hospital Dumbarton Health Centre Dunaros Hospital, Isle of Mull Dunoon General Hospital, Inverclyde Royal Hospital, Greenock Mid Argyll Hospital, Lochgilphead Victoria Hospital, Rothesay Lorn & Isles DGH, Oban Gartnavel General, Glasgow Southern General, Glasgow | Ophthalmology Department Hairmyres Hospital Eaglesham Road East Kilbride Ophthalmology Department Wishaw General Hospital Netherton Road Wishaw Ophthalmology Department Monklands District General Hospital Monkscourt Drive Monklands Airdrie | Princess Alexandra Eye Pavilion, Edinburgh St. John's Hospital, Livingston. |
| 1.7 Biomicroscopy arrangements | Technical failure examinations are performed at the following locations: All Aberdeen City residents are assessed at the David Anderson Building. Moray patient are offered a location closer to home and can may be booked into any of following venues: Leanchoil Hospital Forres. Dr Grays Hospital Elgin Jubilee Hospital Huntly Chalmers Hospital Banff Seafeild Hospital Buckie | People with unobtainable or ungradable images are assessed by slit-lamp biomicroscopy. These clinics are held weekly at Gartnavel General Hospital, Victoria Infirmary, Southern General Hospital and Glasgow Royal Infirmary – all in Glasgow, and as required at Royal Alexandra Hospital, Paisley, Greenock Health Centre, Dumbarton Health Centre and at First Sight Opticians, 66 High Street, Johnstone. Ophthalmologists deliver the slit lamp clinics at Glasgow Royal Infirmary and at Royal Alexandra Hospital, Paisley. All the other slit lamp clinics are | North Highland patients are referred to an Optometrist based slit lamp clinic in the following sites, depending on their nearest venue for referral: At Centre for Health Science, Inverness Lawson Memorial Hospital in Golspie Portree Hospital Belford Hospital in Fort William Caithness General Hospital in Wick Argyll & Bute patients are referred for a slit lamp examination into the Ophthalmology departments detailed above at item 1.6. | Patients with a status of technical failure following photography, receive a letter to inform them that images taken are un-gradable and they have been put on a waiting list to have slit lamp examination carried out. There is a slit lamp service at each of the 3 static sites. There is 3 sessions of slit lamp carried out at each of the 3 static sites. (a total of 24 patients each week per site) = wte 0.3 per site. Technical failure at slit lamp will result in the patient being referred to ophthalmology. The slit lamp clinics see patients for recall and patients who are newly referred to slit lamp. The slit lamp clinics are run by Registered Nurses who have | An appointment is made for patients in a slit lamp clinic at one of the locations below, based on where they live. St John's hospital, Livinston PAEP, Edinburgh Roodlands Hospital, Haddington. |

| 1.8 Health Board GP | 83 | delivered by optometrists. Approx 274 | North Highland = 67 A&B = 34 | undergone specialised training in slit lamp examination. The slit lamp clinics can be increased or decreased depending on demand as it is organised wholly within the Diabetes Retinal Screening Service. | 126 |
|-------------------------------|----|--|---|--|-----|
| Practices | | | Total GP practices = 101 | | |
| 1.9 Screening GP Practices | 83 | Approx 274 | North Highland Patients are invited from the 12 Inverness based GPs to come for screening at DRS in Centre for Health Science, Inverness. DRS provide a mobile clinic based at the remaining 55 GP sites or nearest community hospital. Argyll & Bute DRS provide a mobile clinic based at three of the GP practices which are not accessible to a High Street Optometrist in the area. DRS control recall of patients for all 101 practices but in Argyll & Bute the remaining 31 practices have their patients invited to the nearest participating High Street Optometrist practice for screening. | 98 | 126 |

| 2. Delivery Model | | | | | |
|-------------------|---|--|---|---|--|
| | Grampian | Greater Glasgow | Highland | Lanarkshire | Lothian |
| 2.1 Programme | Screening is delivered through a combination of both mobile and static | All diabetics are initially appointed to a photography screening clinic. These are | North Highland Static photographic sites = 1 based at | Administration office is responsible for booking, cancelling | The programme is delivered using 3 static cameras, |
| structure/ model | screening venues. The static site is used to | held at 4 hospital sites and at 17 other | DRS in CFHS, Inverness. | appointments. Telephone helpline is | located in the main Diabetic |
| | screen patient who live within the City boundary. | sites – clinics, health centres, screening vans, and GP surgeries. | Mobile clinics carried out at 55 GP | open from 9am to 12md and from 1.30pm to 3.30pm. | Out Patient Departments, and 3 mobile cameras in a variety |
| | The mobile screening clinic visits GP practices in Aberdeenshire and Moray. | 5 of the photography sites are generally in use 52 weeks/year, and the other 16 | locations in North Highland and/or nearest community hospital depending | There are 4 static sites in | of GP Practices and Health Centres. The screeners are |
| | Screening is carried out within the practice. Vehicles are for transportation of equipment | sites are used as required, from 4 – 25 weeks/year. Optometrists are not used to | on room availability at the GP site. Photography is carried out by two full | Lanarkshire, which are Time Capsule in Coatbridge, Wishaw | photographers employed by the NHS. All of the screeners |
| | only. | deliver photography clinics. | time NHS Highland retinal screeners. | Health Centre in Wishaw, Brandon House in Hamilton. Each of these | in Lothian also grade at either level 1 or level 2. |
| | One Static Site Three Mobile units | Diabetics who have unobtainable or ungradable images at photography are | Slit lamp provision is provided at five sites detailed in item 1.7 and is carried | sites has 2 fundus cameras and 1 slit lamp. One site in Cumbernauld has | Slit lamp bio-microscopy is |
| | Six slit lamp sites No independent or external provider is | assessed by slit-lamp biomicroscopy. (If at the slit lamp clinic it is felt that | out by an NHS Highland Optometrist. | one fundus camera. There mobile unit service was | done in 3 hospital sites (see 1.7 above) and is done by a |
| | used. | gradeable images can be obtained in future then the diabetic's next | Argyll & Bute Mobile clinics are carried out at 3 GP | discontinued in September 2009, however a business plan to organise | mix of NHS employees (currently optometrists and |
| | | appointment will be for photography.) | sites in the area; Rothesay, Tignabruaich | Topcon to safely transport one of | ophthalmologists though 2 of |

| | | Slit lamp biomicroscopy is delivered weekly at 4 hospital sites, and less frequently at 1 other hospital site, at 2 health centres and from one optometrist's practice. 2 external optometrists are used occassionally, both to deliver biomicroscopy and for level 2 grading. | and Lochgoilhead. This is covered by the NHS Highland retinal screening team from Inverness. The remaining areas are serviced by static photographic sites provided via external contractors who are professionally qualified High Street Optometrists. The area is split into 8 sites:- Oban, Lochgilphead, Campbeltown, Tarbert, Helensburgh, Dunoon, Isle of Islay and Isle of Mull. Over the 8 sites, there are 15 registered external Optometrists providing photographic screening only. Slit lamp referrals for the Argyll & Bute area are seen across the 10 Ophthalmology sites detailed in item 1.6. | fixed cameras to out lying areas and state hospital to provide screening. A contract is being negotiated. | our photographers are in the process of training for this) and community optometrists paid by the session. |
|------------------|---|---|--|--|--|
| 2.2 Cameras Used | Canon CR6 x 2 Canon DGI x 2 Canon EOS digital backs 2 x EOS D30, 1 x EOS D60, 1 x EOS 10D | Fundus cameras – 4 x Canon CR6, 7 x Canon CR-DGI Digital backs – 5 x Canon D30, 2 x Canon 10D, 4 x Canon 20D | North Highland 1x Canon CR6 45NM Serial No: 300621/Canon EOS 20D 1x Canon DGI Serial No: 310325/Canon EOS 20D 1x Canon DGI Serial No: 311286/Canon EOS 20D Argyll & Bute 1x Topcon NW65 Serial No: 2881612/Nikon D90 1x Keeler Kowa NonMyd 7 Serial No: 1602600062/Nikon D80 1x Keeler Kowa NonMyd 7 Serial No: 160260068/Nikon D80 1x Keeler Kowa NonMyd 7 Serial No: 1602600049/Nikon D80 1x Keeler Kowa NonMyd 7 Serial No: 1602600049/Nikon D80 1x Keeler Kowa NonMyd 7 Serial No: 1602600091/Nikon AF15 1x Keeler Kowa NonMyd 7 Serial No: 1602600091/Nikon AF15 1x Keeler Kowa NonMyd 7 Serial No: 1602600057/Nikon D80 1x Topcon TRC/NW6S Serial No: 2881259/Nikon D80 1x Topcon NW6S Serial No: 2880004/Nikon D80 1x Topcon NW6S Serial No: 2881347/Nikon D80 1x Topcon NW6S Serial No: 2881347/Nikdon D80 1x Topcon NW6S Serial No: 2881347/Nikdon D80 1x Canon DGI Serial No: 311531/Canon | 7 x Retinal Camera Fundus Topcon NW6S 7 x Nikon AS15 3 x Nidek SL 450 biomicroscopy | 6 Canon CR-DGi fundus cameras with Canon EOS 10D digital backs. |

| 2.3 Workforce Information | Administrators x 2 part time Administrators x 1 full time Retinal Photographer x 6 part time L1 graders x 0 L2 graders x 4 part time L3 graders x 2 part time Slit lamp examiners x 2 part time | The service has — 1 service manager 1 nurse co-ordinator 8 (6 wte) admin staff 11 (9.9 wte) retinal photographers 1 (0.7wte) photographer/level 1 grader 3 (2.4 wte) photographers/level 2 graders 4 (1.3 wte) slit lamp examiners/level 2 graders 1 associate specialist ophthalmologist (0.8 wte) and 2 consultant ophthalmologists (approx 1 session/week each) | 1x Canon DGI Serial No: 300343/Canon 40D 1x Canon DGI Serial No: 311525/Canon 40D 1x Topcon NW6 Serial No: NK 1x Topcon NW8 Serial No: NK Service Manager: 1 Administrators: 3 Retinal Screeners: 2 External Photographer/Screeners: 15 Slit Lamp Examiner: 1 (North Highland only) All grading work is provided externally by the grading centre in NHS Grampian. | 1wte x Administration Officer 1wte x Administration Assistant 3 x Retinal Screening Photographers wte 2.8 3 x Screener/level 2 grader – Registered Nurse wte 1.78 3 x Level 2 grader/ slit lamp examiner – Registered Nurse. WTE 2.34 1 x Level 3 Grader – Consultant Ophthalmologist WTE 0.2 | 1 Service (Programme) Manager 5 Administrators 3 screeners 4 Screeners/Level 1 graders 4 screeners/level 2 graders 3 level 3 graders 1 employed optometrist plus 2 community optometrists working as needed at slit lamp plus 2 ophthalmologist. working as needed at slit lamp . |
|------------------------------|--|---|--|---|---|
| 2.4 Retinal Screeners | Retinal photographers x 6 Include. Name: SCR+G 1 part time. Current Name: SCR 5 full time (on Maternity leave) Name: SCR 2 full times. Current Name: SCR 7 part time. Current Name: SCR 3 full times. Current (on fixed term temp contract ending OCT.2010) Name; SCR+G 4 part time, Current No C & G units passed as yet. | Photographer 1 – current, 0.6 wte, no units completed Photographer 2 – current, full time, passed units 302 & 304 Photographer 3 – current, full time, passed units 302, 304, 305, 306 Photographer 4 – current, full time, passed units 302 & 304 Photographer 5 – current, full time, no units completed Photographer 6 – current, 0.7 wte, no units completed Photographer 7 – current, full time, passed units 304 & 305 Photographer 8 – current, full time, no units completed Photographer 9 – current, 0.6 wte, passed unit 302 Photographer 10 – current, full time, passed units 302,304, 305, 306 Photographer 11 – current, full time, passed units 304 & 305 | 1 x Current, Full Time Full accreditation achieved: units 301, 302, 303, 304, 305, 306 and 307. 1 x Current, Full Time Completed unit: 304 only. WIP for 301, 302, 303, 304, 305 and 306. 15 External photographer screeners – WIP unit 306 only. | 1 x Current full time (Has C&G Diploma – units 301 – 308) 1 x Current full time (302, 304) 1 x Current part time (302, 304, 305, 306, 307, 308) | 1.0 screener nil C&G accredited 1.0 screener nil C&G accredited 1.0 screener nil C&G accredited 1.0 screener/Level 1 nil C&G accreditation 0.6 screener/Level 2 nil C&G accreditation 1.0 screener/Level2 nil C&G accreditation 1.0 screener/Level2 306 1.0 screener/Level2 306 All of the above staff members are current. |
| 2.5 Retinopathy Graders | Name; SL+G 1, Part time, Current on Maternity leave. L2 grader YES Name: SCR+G 4, Part time, Current, L2 grader YES | Photographer/grader 1 – current, 0.7 wte, grading at level 1, passed unit 304 Photographer/grader 2 – current, 0.9 wte, grading at level 2, no units passed | Grading services provided externally via SLA with NHS Grampian. | 1 x L2 Current part time – (City and Guilds assessor for units 302,304, 305, 306, 307, 308) Due to retire Dec 2010) | 1.0 screener/Level 1 nil C&G accreditation 1.0 screener/Level 1 nil |

| | Name: SCR+G 1, Part time Current L2 grader YES Name: SL+G 2, Part time Current L2 grader YES Name: HG 1, part time Current L3 grader YES Name: HG 2, part time Current L3 grader YES All level two are studying and working towards the units | Photographer/grader 3 – current, 0.5 wte, grading at level 2, passed units 307 & 308 Photographer/grader 4 – current, full time, grading at level 2, passed units units 301, 302, 303, 304, 305, 306, 307, 308 Photographer/grader 5 – current, full time, grading at level 2, passed units units 301, 302, 303, 304, 305, 306, 307, 308, 309 Ophthalmologist 1 – current, 0.8 wte, grading at level 3 Ophthalmologist 2 – current, 0.1 wte, grading at level 3 Ophthalmologist 3 – current, 0.1 wte, grading at level 3 | | 1 x L2 Current part time (302,304,305,307) 1 x L2Current Part time (302,304,305,306,307) | C&G accreditation 1.0 screener/Level 1 nil C&G accreditation 1.0 screener/Level 1 nil C&G accreditation 0.6 screener/Level2 nil C&G accreditation 1.0 screener/Level2 306 1.0 screener/Level2 nil C&G accreditation 1.0 screener/Level2 306 0.2 Level2 + slit lamp nil accreditation 0.2 Level2 + slit lamp nil accreditation 0.4 Level2 + slit lamp nil accreditation 0.5 Level2 + slit lamp nil accreditation 0.6 Level2 + slit lamp nil accreditation 0.7 Level2 + slit lamp nil accreditation 0.8 Level2 + slit lamp nil accreditation 0.9 Level2 + slit lamp nil accreditation 0.1 Level2 + slit lamp nil accreditation 0.2 Level3 + slit lamp nil accreditation 0.3 Level3 + slit lamp nil accreditation 0.4 Level3 + slit lamp nil accreditation 0.5 Level4 + slit lamp nil accreditation 0.6 screener/Level2 nil C&G accreditation 0.6 screener/Level2 nil C&G accreditation 0.7 Level2 nil C&G accreditation 0.8 Greener/Level2 nil C&G accreditation 0.9 Level2 nil C&G accreditati |
|----------------------------|---|---|--|---|--|
| 2.6 Slit Lamp Examiners | Current/Non-current Full/Part Time Are they a L2 grader? Level of accreditation achieved (i.e status against units 303, 304, 305, 307 and 308) Please note: - the C&G units should be complete ideally within 12 calendar months (one year) and exceptionally within 24 months (2 years) of joining the workforce. (Added as per minute of Executive committee 18 Sep 09) SL+G 1, part time Current on maternity leave. L2 Grader YES SL+G 2, part time. Current L2 Grader YES Both staff are working towards obtaining the unit credits | Slit lamp examiner 1 – current, 0.6 wte, grading at level 2, passed units 301,302,307,308 Slit lamp examiner 2 – current, 0.1 wte, grading at level 2, no units completed Slit lamp examiner 3 – current, 0.5 wte, grading at level 2, no units completed Slit lamp examiner 4 – current, 0.1 wte, grading at level 2, no units completed | 1 x Current, Part Time The are not working as a L2 grader. Full accreditation achieved: units 301, 302, 307 and 308. | 1 x Current full time (301, 302, 304, 305, 306, 307, 308) also L2 grader 1 x Current part time (302, 304, 305, 306, 307, 308) also L2 grader 1 x Current part time (Has C&G Diploma units 301 – 308) also L2 grader | 0.1 optometrist nil C&G accreditation no longer employed 0.2 optometrist + level 2 grader nil C&G accreditation P/T community optometrist nil C&G accreditation P/T community optometrist nil C&G accreditation P/T ophthalmologist + level 3 grader P/T ophthalmologist Unless stated the above are all current staff. |
| 2.7 Screening GP practices | 83 | Approx 274 | 101 as per item 1.8. | 98 | 126 |

| 1. Programme Informat | tion | | | |
|------------------------------------|---|--|--|--|
| 1.1 Health Board Name | Orkney | Shetland | Tayside | Western Isles |
| 1.2 Programme Board Coordinator | Dr Ken Black, Consultant in Public Health Medicine, Public Health Office, Victoria Street, Kirkwall ken.black@nhs.net 01856 879800 | Alison Irvine, Diabetic Specialist Nurse, Gilbert Bain Hospital, Lerwick. Email: alison.irvine@nhs.net Phone: 01595-743000 extension 3444. | Dr Julie Cavanagh DRS Board Coordinator Consultant in Public Health Directorate of Public Health King's Cross Clepington Road Dundee DD3 8EA 01382 425684 julie.cavanagh@nhs.net | Mr Phil Tilley Planning & Development Manager |
| 1.3 Accountable clinical lead | Post vacant | Dr Pauline Wilson, Consultant Physician Email: paulinewilson@nhs.net Phone: 01595-743000 extension 3226 | Dr Graham Leese DRS Clinical Lead Consultant Physician Wards ½ Ninewells Hospital Dundee DD1 9SY 01382 632237 or 01382 660111 bleep 4320 graham.leese@nhs.net | Dr K N Achar Consultant Physician |
| 1.4 Service Manager | Nickie Milne, DRS Administrator, Assessment and Rehabilitation Office, Balfour Hospital, Kirkwall. Nichola.milne@nhs.net 01856 888023 | Alison Irvine, Diabetic Specialist Nurse, Gilbert Bain Hospital, Lerwick. Email: alison.irvine@nhs.net Phone: 01595-743000 extension 3444. | Ms Angela Ellingford DRS Programme Mananger Diabetic Retinopathy Screening Programme Diabetes Support Centre Level 7 Ninewells Hospital Duundee DD1 9SY 01382 740068 angela.ellingford@nhs.net | Marina Sinclair Diabetes Service Co-ordinator |
| 1.5 Location | Assessment and Rehabilitation Office, Balfour Hospital, Kirkwall. 01856 888023 | Gilbert Bain Hospital, Lerwick. Contact number: 01595-743000 extension 3030 | Diabetic Retinopathy Screening Programme Diabetes Support Centre Level 7 Ninewells Hospital Duundee DD1 9SY | The Diabetes Centre, Western Isles Hospital HS1 2AF |
| 1.6 Referral Centres | Visiting Highland Ophthalmology Service held in Balfour Hospital, Kirkwall, Orkney | Gilbert Bain Hospital and Aberdeen Royal Infirmary (ARI) | Ninewells Hospital, Dundee Arbroath Infirmary Montrose Links Health Centre Stracathro Hospital | Ophthalmology Clinic Out-Patient Department Western Isles Hopsital/ Uist & Barra Hospital |

| | | | Perth Royal Infirmary | |
|----------------------------------|--|---|--|---|
| 1.7 Biomicroscopy arrangements | At present all patients requiring slit-lamp assessment is referred to the visiting Ophthalmology Service and is seen within their Out-patient Eye Clinic which is held on a monthly basis at Balfour Hospital, Kirkwall. | Gilbert Bain Hospital with visiting Slit Lamp Nurse from ARI | Slit lamp examinations are carried out by Ophthalmologists. 2x clinics per week based at Ninewells Hospital 1x per week at Perth Royal Infirmary Montrose Links Centre x2 per annum Arbroath Infirmary x3 per annum Stracathro Hospital x3 per annum | R Doig Optometrist Ltd 36 Kenneth Street Stornoway R Doig Optometris Ltd Rathad Mhic Eoine Balivanich Benbecula Uist |
| 1.8 Health Board GP Practices | 15 | 10 | 69 | 12 |
| 1.9 Screening GP Practices | 15 | 10 | 69 | 12 |

| 2. Delivery Model | | | | |
|--------------------------------|--|---|---|---|
| | Orkney | Shetland | Tayside | Western Isles |
| 2.1 Programme structure/ model | Screening is delivered on one site which is within the Balfour Hospital. We have one static retinal camera. We have one Retinal Screening Technician who delivers approximately one clinic per week. All slit-lamp patients are seen by the visiting Ophthalmology Service and their information is passed back to the retinal screening administration. Our grading is sent to Tayside. | We have 1 static photographic site and no biomicroscopy sites. We do not use any independent/external provider. | Two permanat static sites. One mobile unit which can be a 'transportable' system ie has a side lift so that equipment can be taken off the mobile unit and set up in a temporary static site. The same unit can also be used as a mobile unit. Second mobile unit is used for this purpose alone. Five biomicroscopy sites Have an SLA with NHS Tayside Department of Ophthalmology to provide slit lamp service. | NHS Western Isles have contracted with R Doig Optometrist Ltd to provide image capture and slit lamp examinations. He has 2 cameras and 2 static sites, one in Stornoway(Lewis) and one in Benbecula (Uist). He is contracted to provide a peripatetic service and a domiciliary service. Patient are invited to make an appointment with R Doig Optometrist Ltd for their image capture. GPs can request a home visit for patients that are unable to go to either of R 'Doig Ltd premises. Screening is also provided for patients who are in hospital or nursing homes NHS Western Isles have a contract with NHS Tayside to provide Level 1-3 Grading |
| 2.2 Cameras Used | We have one camera. Canon EOS 20D with CR-DGi at present we do not have any back up digital camera or fundus camera. | We use a Canon 10 D. | Serial Number Canon CR6-45NM Non-Mydriatic Retinal Camera 300570 Canon CR6-45NM Non-Mydriatic Retinal Camera 300654 Canon CR-DGi Non-Mydriatic Retinal | 2 fundus Cameras Nokia D70s Topcon TRC NW6 |

| practices | | | | |
|------------------------------|--|---|---|---|
| 2.7 Screening GP | 15 | 10 | units 301, 302, 303, 304, 305, 306, 307, 308 and 309 | 12 |
| 2.6 Slit Lamp Examiners | Not applicable as slit-lamp service at present delivered by Highland Ophthalmology Consultants | From NHS Grampian - ARI | 6 - Ophthalmologist/Level 3 grader 7 - Ophthalmologist 8 - Ophthalmologist 1 - Completed C&G Diploma (WTE) | 1 Slit Lamp Examiner - R Doig Optometrist LTD |
| 2.5 Retinopathy Graders | Grading services are contracted to Tayside. | N/A as all grading is completed in NHS Grampian | 1 – Completed C&G Diploma (WTE) units 301, 302, 303, 304, 305, 306, 307, 308 and 309 2 – Assessor for C&G (near retiral age) (WTE) 3 - Completed C&G Diploma (WTE) units 301, 302, 303, 304, 305, 306, 307 and 308 4 – units 302, 304, 305 and 306 (WTE) 5 – unit 305 (30 hpw) | Grading contracted to NHS Tayside |
| 2.4 Retinal Screeners | For each retinal photographer who has worked in your programme at any time in the reporting period provide the following pseudonymised information. This information should reflect the status at the 31st March at the end of the reporting period: Current employment Part Time – 27 hours Not completed City and Guilds modules. | Current 1 (Part Time) /Non-current 0 Level of accreditation achieved (i.e status against units 304, 305 and 306) None as there was no assessor arranged until very recently. Please note: - the C&G units should be complete ideally within 12 calendar months (one year) and exceptionally within 24 months (2 years) of joining the workforce. (Added as per minute of Executive complete 18 Sep 09) | 1 – Completed C&G Diploma (WTE) units 301, 302, 303, 304, 305, 306, 307, 308 and 309 2 – Assessor for C&G (near retiral age) (WTE) 3 - Completed C&G Diploma (WTE) units 301, 302, 303, 304, 305, 306, 307 and 308 4 – units 302, 304, 305 and 306 (WTE) 5 – unit 305 (30 hpw) 6 – 304 and 305 (30 hpw) | 3 Screeners All working through the City & Guild Units |
| 2.3 Workforce Information | At present we have one member of staff within the retinal screening programme in Orkney who delivers all the administration, screening and co-ordination of the service. | We have 1 administrator (15 hours per week) and 1 retinal photographer (15 hours per week). We do not have any graders. We have a visiting Slit Lamp Nurse from ARI every 3 months. | 3x Level 3 Grader/SL examiners 1x Level 2 grader/SL examiner 1x Screener/Level 2 grader 3x Screener/Level 1 grader 1x Screener 1x Programme Administrator 1x Assistant administrator 1x Booking clerk | NHS Western Isles 1 Part Time Administrator 1 Part Time Service Manager 1 Part Time board Co-ordinator R Doig Optometrist LTD 3 Screeners 1 Slit lamp examiner(Optometrist) NHS Tayside Level 1-3 Grading |
| | | | Camera 310708 Canon CR-DGi Non-Mydriatic Retinal Camera 310368 Canon EOS-20 Digital Camera 14209103 Canon EOS-20 Digital Camera 19210113 Canon EOS-20 Digital Camera 14309090 Canon EOS-20 Digital Camera 15309056 | |

Diabetic Retinopathy Screening – proposal for study to explore reasons for non-attendance

Purpose

This proposal is for a small study to support service improvement in the Diabetes Retinopathy Screening service, with a view to reducing the number of patients who miss multiple appointments.

Background

One of the main complications associated with diabetes is damage to the retina, which if undetected and left untreated can cause blindness. Annual retinopathy screening for early detection is therefore recommended for all patients with Type 1 and Type 2 diabetes.

The Diabetic Retinopathy Screening Office coordinates services throughout Lothian and Borders. Screening takes place in diabetes clinics, mobile units or at designated opticians with appropriate facilities.

Previous work

In March 2010 the Diabetic Retinopathy Screening (DRS) Service Steering Group carried out an audit of patients in Lothian who had failed to attend three invitations to attend DRS appointments(1). This found that patients in younger age groups (15-24 and 25-44) were more likely to DNA compared with older age groups, and that this pattern was more pronounced in some geographical areas, specifically North West Edinburgh, South East Edinburgh and West Lothian. Examination of DNA rates by smaller intermediate geographical area showed wide variation, with higher levels generally, though not exclusively, in areas with higher levels of deprivation. Patients with Type 1 were also more likely to DNA than patients with Type 2 diabetes and patients from some ethnic groups ('other white' and 'Indian') more likely to DNA in comparison with other ethnic groups ('white Scottish' and 'Pakistani').

A literature review was carried out at the same time to explore reasons for non attendance at general and specialist diabetes clinics, and possible interventions to reduce DNA rates (2). The review found that non attenders tend to be younger and less well informed about their condition, and are likely to miss further appointments having defaulted once. Common reasons cited for non attendance included access issues, such as lack of transport or conflict with employment, as well as forgetting or administrative error.

A more focused piece of work was carried out in October 2010 by the Screening Service Manager in the Borders, based on sending a postal questionnaire to patients who had missed their appointment (3). There was a 22% return rate, and access issues, including transport, illness and poor mobility, were a strong feature in responses received. However, a number of patients appeared to be confused about the purpose and importance of retinopathy screening, or possibly how this differed from an annual eye check.

Proposal - aim and method

Aim

During the time period covered by the Lothian audit (17th December 2008-13th March 2009) 527 people failed to attend three appointments, from a total of 30,514 diabetic people aged over 12 years of age on the Lothian SCI DC register.

Although this is a relatively small number, the consequences of not attending screening appointments can be very serious for individual patients, as well as costly for the heath service.

It is proposed that a small project be undertaken in Lothian to build on the work described above, with a view to exploring:

- Whether the reasons for non attendance are similar for Lothian patients, as for those in the Borders
- Which kind of interventions patients feel would facilitate their attendance

Annex F

The aim is to provide evidence to support service improvement by identifying how and where to target interventions that will reduce DNA rates for retinopathy screening in Lothian and Borders. The ultimate goal is to support a reduction in the number of people with diabetes suffering visual loss because of diabetic retinopathy.

Method

The proposed method is to conduct telephone interviews with 20 patients who have missed their appointments and failed to respond to two subsequent letters asking them to reschedule.

Potential participants for the study would be identified from the diabetes register, and should include a mix of patients i.e. women and men, from younger and older age groups, with Type 1 and Type 2 diabetes, and from different geographical areas.. The aim is to recruit patients who have missed multiple appointments. Invitation would be by letter in the first instance, offering preferred time slots for a phone call and giving people the option to refuse, and followed up by a phone call. Individuals can still decide not to participate at this point if they so wish.

The main areas which will be explored with respondents are:

- Administration (difficulty in cancelling or rescheduling an appointment, time between receipt of letter and appointment date, clarity of information contained in letter)
- Difficulty in getting to the appointment (issues to do with transport/parking, mobility, illness, of self or dependants)
- Knowledge and understanding (why screening is important, information received about DRS and who from, anxiety and/or misconceptions about the procedure)
- Ideas for practical or supportive measures which might address the difficulties identified, and help patients to attend appointments in the future

The project will be co-coordinated by:

Joy Tomlinson, Consultant in Public Health, NHS Lothian Norah Grant, Manager Diabetic Retinopathy Screening Service, Lothian and Borders Sheila Wilson, Senior Health Policy Officer, NHS Lothian (who will conduct the interviews)

- (1) Tomlinson, Joy. Review of Patients who have not attended DRS appointments. Edinburgh, 2010
- (2) Marsh, Allison. Causes for Do Not Attend status in Diabetic Retinopathy Screening Edinburgh, 2010
- (3) Cameron, Tim. <u>Diabetes Retinopathy Screening Programme DNA Survey.</u> 28 October 2010

Summary

This brief analysis has allowed us to examine the characteristics associated with multiple failures to attend screening appointments. Younger age groups of diabetic patients are more likely to have multiple DNA screening episodes in comparison to older age groups. This age related pattern is most pronounced in North West Edinburgh, South East Edinburgh and West Lothian. Type 1 diabetics are more likely to have multiple DNAs than those with type 2. Patients with multiple DNA's have on average a higher HbA1c. There is also an association between particular ethnicity coding and multiple failures to attend. Examination of the DNA rate by smaller intermediate geographical area shows multiple DNA rates vary from 1% to 14%. A substantial proportion of areas with higher DNA rates also have higher levels of deprivation but some relatively less deprived areas also feature. It is

Annex F

possible that some of these areas may have a higher proportion of younger residents. The number of people who DNA in individual intermediate geographical areas is relatively small. It may be that some of the variation seen here could simply have occurred by chance. Development of a DNA dataset over time would allow more reliable analysis.

Suggested future areas of work:

- Repetition of DNA audit over the coming year in order to develop robust data set (problem of small numbers)
- Literature review to examine methods of reducing number of DNAs especially among younger people
- Consideration of possible interventions/investigations into high DNA localities
- Consider carrying out comparison of DNA rates from diabetic outpatient clinics utilising TRAK data.

Dr Joy Tomlinson Consultant Public Health Medicine NHS Lothian

Survey Report for DRS programme on patients attending eye screening

A brief summary of the survey report presented by Angela Ellingford (Service Manger NHS Tayside) given by power-point presentation. Only a selection of the slides is shown.



'Plan' - Method



Brief questionnaires

- simple/inexpensive
- responses anonymous, more likely to be honest
- · visible comment cards on display board
- · opportunity for feedback
- opportunity for improvement and reinforcement of good practice

National Feedback – What was good about the Service



- · efficient and prompt service
- · very reassuring, put mind at ease
- · staff helpful, professional, polite
- staff explained each stage
- · you get a good laugh
- · very flexible, staff fitted me in
- home visits (optom service)

Annex G

'Plan' - How can we gather information?



Various techniques

- brief questionnaires
- complaints
- focus groups
- · interviews
- · patient forum
- patient stories

'Plan' - Questions



What was good about your recent visit to the Diabetic Screening Service?

(Please be as specific and honest as possible)

What was not so good about your recent visit to the Diabetic Screening Service? (Please be as specific and honest as possible)

If you could change one thing about your visit to the Diabetic Screening Service, what would it be?

(Please be as specific and honest as possible)

Any further comments
(Please be as specific and honest as possible)

How would you mark our department out of ten:

National Feedback – What was not so good about Service

NHS

- · drops, not being allowed to drive
- parking
- lack of information
- waiting time for results
- perhaps more time to ask questions
- better signage
- having to take time off work

National Feedback – Changes you would like



- not having to have dilating drops
- better access/parking
- not being informed of result at time of appointment
- more flexible appointments after working hours or weekends
- · having a doctor to answer any questions

National Feedback – Further Comments



- text message reminder for your appointment
- · result letter impersonal
- eye screening at the same time as diabetic appointment or same time as other health care professional appointments

Annex G

National Feedback – Service Modifications



- · NHS WI
- optometry letter
- · NHS Highland
 - telephone numbers as a footer because patients complained not all letters had a contact number
 - · installation background music in reception area
- NHS Orkney
 - new car parking facilities and a hospital project committee has been setup to address hospital signage

National Feedback – Morale Boasters



- · excellent Service and did not have to wait
- thanks to all staff who made my appointment an easy experience
- · looking forward to next year
- · I wish all Services could be like this one
- · keep up the good work
- thank you for keeping an EYE on me (pun intended)
- if I did not have diabetes I would still like to come because of the staff!

Report provided by Angela Ellingford (DRS Service manager NHS Tayside) at the DRS Study Day 2010.

Increasing the uptake of DRS appointments in higher risk South Asian patients in NHS Lothian.

- Diabetic Retinopathy is a common complication of diabetes affecting the blood vessels
 of the retina. It is the leading cause of blindness amongst people of a working age in
 Scotland. However if detected early enough treatment can prevent the progression of
 the disease and prevent sight loss for many years in most patients.
- Diabetic retinopathy screening for diabetic patients aged 12 and over is carried out by the Diabetic Retinopathy Screening Service (DRS) normally on an annual basis with some patients being seen more often depending on their condition.
- o In 2010 there were **237**, **468** (Scottish Diabetes Survey 2010⁴) patients aged 12 or over who are diagnosed with diabetes in Scotland. Of these **205**,**767** were offered an appointment and **175**,**582** patients were successfully screened by photography.
- o In NHS Lothian there are a total number of **38,887** diabetic patients registered on the Soarian system, see Annex 1 (DRS statistics for Feb 2012, NHS Lothian). (The Soarian system is used to call/recall and manage patients who are screened for diabetic retinopathy). After suspensions the total number of eligible patients due to have their eyes screened for NHS Lothian is **31,135**.
- It can be seen from the attached screening uptake report Annex 1 (DRS statistics report Feb 2012, NHS Lothian) that specific higher risk^{1, 2} ethnic groups have significantly lower than average national and local uptake rates for DRS screening appointments offered.
 - The screening uptake rate (Key Performance Indicator KPI 2) for
 - NHS average in Scotland = 80.1%
 - Overall average uptake for NHS Lothian = 78.3%

| • | Chinese – | 80.7% |
|---|------------------|-------|
| • | Pakistani – | 74.9% |
| • | Indian – | 72.4% |
| • | Black African- | 72.0% |
| • | Bangladeshi – | 71.2% |
| • | Black Caribbean- | 66.7% |

- o If these patients are not attending DRS appointments for retinopathy screening, it is highly likely that they may also not be attending other diabetes management appointments.
- Patients of South Asian ethnicity are at higher risk^{1,2} than others of losing vision from diabetes. Diabetic retinopathy and retinal lesions occur earlier and at higher levels amongst South Asian diabetics compared to Caucasian diabetics^{1,2}.
- The objective in encouraging patients to attend for retinopathy screening would be to reduce the risk of sight loss and to reduce the long term costs of diabetes complications

developing. Since the number of South Asian patients are relatively small, personalised contact by Minority Ethnic Health Inclusion Service (MEHIS) Link workers is a realistic objective

- Description of the initiative/project, its aims and objectives
 - The aim of this initiative is to increase uptake of DRS screening for patients of South Asian ethnicity in NHS Lothian.
 - o The objectives would be to
 - 1. Recognise barriers to good attendance for these ethnic groups and remove or reduce these where possible
 - 2. Educate individuals to understand the importance of attending all diabetic management appointments.
 - 3. Educate patients and staff on the higher risks of certain ethnic groups
 - 4. Encourage the recording of ethnicity to help target high risk groups.

Proposed Pilot

- NHS Lothian's Minority Ethnic Health Inclusion Service (MEHIS) Link workers have successfully increased uptake of Keep Well health checks and Oral Health screening programmes.
 - Trained Urdu / Punjabi and Bengoli speaking MEHIS Link workers will contact identified Indian, Pakistani, Bangladeshi and other South Asian patients and invite them to screening appointments.
- o MEHIS will work closely with the DRS service in NHS Lothian
- o Baseline and monthly reports will be produced to monitor progress.

Outcomes

An increase in DRS uptake rate to a level that is at least the average for NHS Lothian.
 As these groups are at higher risk^{1, 2} then a higher than average uptake rate would be preferred.

• Lessons we expect to learn

- o Identify barriers to screening take-up from the patient's perspective-(language, importance of location of screening services, female/male staff, etc).
- o Educational needs for DRS staff, other health professionals and patients including their families and carers.
- Cost effectiveness
- Adjustments required to DRS systems and procedure, e.g. to ensure 100% ethnic coding.
- Advice to others / things to look out for
 - o To review the local ethnic groups and compare attendance with other groups.
 - o Review local capability of Link workers to contact high risk ethnic groups.
 - o Review local policies and procedures for recording ethnicity.
- Is there potential for the initiative / project to be integrated into the wider work of the organisation?

- o If the South Asian pilot is successful, African and African Caribbean communities could be targeted by MEHIS African Link workers. Although specific high risk ethnic groups are targeted in this proposal, the initiative can be widened to other groups where identified to be below the local average uptake.
- Is there potential for the initiative / project to be replicated in other areas of Scotland?
 - o Smaller health boards or boards with few high risk minority ethnic patients may not find it cost effective to employ Link workers.
 - It is possible to develop MEHIS to provide Link worker support to other Health Boards.
 - Telephone invitations from Link workers could be used for all Health Boards.
 - Link workers could also support health professionals to work cross culturally using telephone or video conferencing facilities.
- Other Health Board areas in Scotland will have different ethnic groups represented within their demographic who may be poor attenders. The outcomes of this initiative will help inform other health boards that pro-active steps can be taken to ensure that high risk ethnic groups within their health boards can be encouraged to attend diabetic management appointments and that any potential barriers for their attendance can be removed or reduced.

Contact details

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|---------------------------|------------------------------------|
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References

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[2] Raymond NT, Varadhan L, Reynold DR, Bush K, Sankaranarayanan S, Bellary S, Barnett AH, Kumar S, O'Hare JP; UK Asian Diabetes Study Retinopathy Study Group. Higher prevalence of retinopathy in diabetic patients of South Asian ethnicity compared with white Europeans in the community: a cross-sectional study. Diabetes Care. 2009;32:410-5

Annex H

DRS statistics for NHS Lothian- Feb 2012 (report interval – last 367 days)

Screening Uptake

Report: Board of Treatment 'Lothian' irrespective of Health Board (Board of Residence)

Grouped by: Ethnic Code

| Reporting Start Date: | 24/02/20 | 11 | | Re | ference Date: | | 24/02 | /2012 | | | Repor Inter | | (| 367 days | | | | |
|----------------------------|-----------------|-----------------|--------------------|--------------------|------------------|-----------------|---------|-------|---------|-------|----------------|-------|---------|------------------|----------|-------------|----------|-------|
| KPI 0: Summary Sta | tistics | | | | | | | | | | | | | | | | | |
| | | Bangladeshi | Black | Black | Chinese | Indian | Not Re- | Other | Other | Other | Other | Other | Other | <u>Pakistani</u> | Un-known | White Irish | White | Total |
| | | | <u>African</u> | Caribbea | <mark>n</mark> | | corded | | Asian | Black | Mixed | White | White | | | | Scottish | |
| | | | | | | | | | | | Origin | | British | | | | | |
| Total Population (TP) | 1867 | <mark>75</mark> | 134 | <u>6</u> | <mark>151</mark> | 278 | 9435 | 211 | 177 | 34 | 1127 | 1223 | 3242 | 479 | 5 | 151 | 19292 | 37887 |
| Temporarily suspended (TS) | 51 | 8 | 9 | 0 | 15 | 21 | 1130 | 18 | 20 | 5 | 121 | 81 | 307 | 58 | 0 | 8 | 1642 | 3494 |
| Permanently suspended | 1723 | 8 | <mark>36</mark> | 3 | <mark>20</mark> | <mark>63</mark> | 409 | 26 | 53 | 5 | 28 | 121 | 121 | 20 | 3 | 15 | 1037 | 3691 |
| (PS) | | | | | | | | | | | | | | | | | | |
| Temporarily unavailable | 47 | 0 | 4 | 0 | 3 | 2 | 126 | 3 | 6 | 0 | 17 | 10 | 30 | 2 | 0 | 1 | 182 | 433 |
| (TU) | | | | | | | | | | | | | | | | | | |
| Eligible Population (EP = | 140 | 59 | <mark>93</mark> | 3 | 119 | 196 | 8022 | 170 | 110 | 24 | 995 | 1031 | 2844 | <mark>403</mark> | 2 | 129 | 16795 | 31135 |
| TP-TS-PS+TU) | | | | | | | | | | | | | | | | | | |
| KPI 2: Screening up | take rate | • | | | | | | | | | | | | | | | | |
| | | Bangladeshi | Black | Black | Chinese | Indian | Not Re- | Other | Other | Other | Other | Other | Other | Pakistani | Un- | White Irish | White | Total |
| | | | African | Caribbea | <mark>n</mark> | | corded | | Asian | Black | Mixed | White | White | | known | | Scottish | |
| | | | | | | | | | | | Origin | | British | | | | | |
| People attending at least | 53 | 42 | <mark>67</mark> | 2 | <mark>96</mark> | 142 | 5838 | 118 | 84 | 16 | 789 | 790 | 2276 | 302 | 2 | 102 | 13660 | 24379 |
| once (ATT) | | | | | | | | | | | | | | | | | | |
| Percentage (100 * ATT / EF | P) 37.9% | 71.2% | <mark>72.0%</mark> | <mark>66.7%</mark> | 80.7% | 72.4% | 72.8% | 69.4% | 6 76.4% | 66.7% | 79.3% | 76.6% | 80.0% | 74.9% | 100.0% | 79.1% | 81.3% | 78.3% |

Annex I

Evaluation of Management group meeting held on 9th Nov 2011

| EQA Session Dr Ken Swa | Agree |
|--|--------------|
| Objectives of session set out clearly | 8 |
| | 99% |
| Presentation style clear & understandable | 98% |
| Timely & appropriate summaries given | 00.14 |
| EQA Session David Crombie | 99% Agree |
| - | Agree |
| Objectives of session set out clearly | 100% |
| Presentation style clear & understandable | 100% |
| Timely & appropriate summaries given | 100% |
| EQA Workshop Session | Agree |
| Objectives of session set out clearly | 100% |
| Format created participative environment | 10070 |
| 2 5. mar er entre parties parties en la communit | 100% |
| Facilitator flexible to needs of the group | 100% |
| Autograding – Neville Lee | Agree |
| Objectives of session set out clearly | 100% |
| Presentation style clear & understandable | 99% |
| Timely & appropriate summaries given | 100% |
| KPI Review – Mike Black | Agree |
| Objectives of session set out clearly | 100% |
| Presentation style clear & understandable | 100% |
| Timely & appropriate summaries given | 99% |
| KPI Review – Group work session | Agree |
| Objectives of session set out clearly | 98% |
| Format created participative environment | 99% |
| Facilitator flexible to needs of the group | 100% |
| OCT & DRS Pathway | Agree |
| Objectives of session set out clearly | Agree |
| Objectives of session set out clearly | 95% |
| Presentation style clear & understandable | 96% |
| Timely & appropriate summaries given | 99% |

| What worked well | Suggestions for improvement |
|---|---|
| Smaller groups Everyone got involved Topics relevant & focused Networking & discussion sessions KPI, Autograding and EQA presentations | Roving microphone for feedback and Q&A session Inadequate lunch Overall time a bit short Try not to coincide with Public Health Conference |
| Workshops, well facilitated Staying in 1 group to focus Having a facilitator In groups with people whom i have links with I was allowed to ask some q's! Smaller no of topics just right Facilitator keeping us to time and explaining aims /processes well Networking Better staying in 1 room Being in grading centre groups Good big overhead screen/microphones for speakers Good pace Better format than previous year | A list of KPI's on each table would have been good Acoustics could have been better |

| | Excellent |
|------------------------|-----------|
| Overall Meeting Rating | 95% |
| Overall Venue Rating | 92% |

Evaluation provided by Alison Manson – AMS Business Training Solutions.

Report on the DRS In-Service training day 10th Nov 2011

Introduction

The fourth national training day was held in the Perth Concert hall. The day followed the format of the 2010 event and consisted of a mixture of presentations, networking and workshops with tea, coffee and lunch provided.

There was no limit for the venue on attendees and we received 112 registration requests. We also had 11 presenters and 6 patient volunteers. We are very thankful to those who spoke at the event and took the time in preparing high quality presentations and delivering workshops. We are also most thankful to the patient volunteers from NHS Tayside for attending this event and allowing themselves to be used in short training sessions. I would particularly like to thank the DRS staff from NHS Tayside for organising the attendance and management of these volunteers.

The day was again supported by previous funding from The Scottish Diabetes Group and we are extremely grateful to them for providing sufficient funding to allow us to provide the study day at no charge to the delegates. I would also like to thank Angela Ellingford (NHS Tayside) for arranging with Haag-Streit to supply the demonstration OCT and Slit Lamp equipment and of course to Haag-Steit.

The presentations for the day are available on the DRS collaborative website at http://www.ndrs.scot.nhs.uk/IT/index.htm

Summary of the feedback

Of all the total of 117 who attended 87 completed an evaluation form. In general the feedback was positive.

- The venue was rated as good to excellent by 96% of respondents.
- The catering provided was rated good to excellent by 70% of respondents.
- Presentations were rated as good to excellent by more than 85% of respondents
- Opportunities for discussion was rated as good to excellent by only 60% of respondents
- Networking Opportunities were rated as good to excellent by only 63% of respondents
- The workshops were highly rated by those who attended.
- A full breakdown of feedback data for all workshops and presentations is available on the website.

•

From the 47 individual comments received it was clear that the workshops were generally well received although the slit lamp and OCT workshops could have been better. There was a emphasis on providing an in depth workshop for administrators this year and that was well received. The EQA review workshop was also well received. There are also comments that some of the workshop sessions were not detailed enough and this is probably because of limits of relatively short sessions. A completely new workshop regarding diabetes conversational mapping was particularly well received. The conclusion from the feedback and comments is that the event was relevant and provided good training opportunities for staff.

The costs for the event are as follows

| The costs for the event are as follows | | | | | |
|--|----------|--|--|--|--|
| Venue and Catering | £4250.83 | | | | |
| Materials and Admin | £850.64 | | | | |
| Miscellaneous travel | £350 | | | | |
| Total cost | £5451.47 | | | | |
| Cost per registered attendee (112) | £48.67 | | | | |

^{*}The 2009 DRS study day cost was £65.50 per attendee.

^{*}The 2010 DRS study day cost was £59.29 per attendee

Annex J

The overall conclusion is that the event was a welcome and cost efficient opportunity to deliver relevant and specific training for all DRS staff across Scotland. Funding and staff availability for such events will continue to be a challenge. Health board areas continue to have difficulty in releasing staff for this type of event. The delivery of sufficiently diverse workshops to a relevant depth of knowledge will be key elements of success in future training events.

Summary of feedback individual comments received -

Good choice of topics

Good venue

Good balance of teaching and audience participation

Slit lamp for geginners was disappointing. Didn't see much and time was to short. More slit lamps and group sessions would be ideal

Handout (anti vegfs) would have been useful

Thank the organisers

Was very pleased. Much more this year for admin staff

EQA talk needed better opportunity for feedback

OCT demo has to be set up so images are visible to all

Enjoyed the day. More food choices would have been better

Plove the venue. Easy to find rooms

Venue good

Cakes were excellent!

Nice cakes

Presentations involving use of images have to be clearer for best results from audience participation. Nice venue

Great amount of information

Loved Mike's intro - thanks

Slit lamp for beginners could be more hands on

Very much enjoyed. Please do it again next year

Slit lamps for us all to try?

Slit lamp exams shoul be more focused on training absolute beginners - pitched too high today

Sound poor! Maybe system was not used properly? I am a little deaf but could not hear a lot of the time. The Norie Miller room appears to have sound absorbent walls.

Afternoon slit lamp teaching session with teaching scopes

EQA was very good presentation and additional information

Best conference so far. Looking forward to next year

Excellent conference, well done and thanks to organisers

A slit lamp training day would be useful

Three ticks

Better delivery of OCT Demo (interesting). Bigger screen is possible

Ensure roaming mikes are available in workshops

Copies of powerpoint presentations would be good

Slit lamp training day for beginners

Lunch nice but open sandwiches hard to eat. Some of the workshops chlostrophobic due to numbers

No focus to presentation. Not much content. Link to big screen in future?

Slit lamps much preferred a more practical approach. Eg lots of slit lamps for us to have a go with more than one teacher. Having been to DRS In Service Day previously I feel this one was very weak in content. Not a great deal for someone other thatn high level graders etc.

Small room for OCT session

Would have been good to have more time on slit lamp. There was not enough time to give everyone a chance to have a proper demonstration of using the slit lamp. Did not find OCT demonstration beneficial

As a retinal screener I felt as though the majority of the In Service training was focused on the advanced retinal examiners. Also it felt like it was just a sales pitch especially OCT and slit lamp

Overall a very good and informative day

Slit lamp for beginners was disappointing as camera could not pick up image and be seen on screen. Maybe an idea to use slit lamps with teaching arms attached so we can look in and see exactly what the slit lamp examiner can see.

Screener who would be interested in understanding the procedures of other dept within the DRS ie admin, referrals etc.

Slit lamp - excellent - some more formalised training with opportunity to 'practice' would be good. OCT - not set up well - most people could hardly see screen as operator in the way. 1:1 better throughout. People left as developed into 1:1 - presenter and operator

Well done. A good day

As a general clinician I find it less?

Very well organised and relevant. Thank you

Good meal. Some workshops not good

Cheers well done on a great day. Well done Mike and team

Should have had microphones for al questions

X Room very hot and stuffy

SCI DC - complex very detailed

Well done to Mike and team again for a well organised and enjoyable day, thanks.

Anti VEGFs - brilliant slides

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