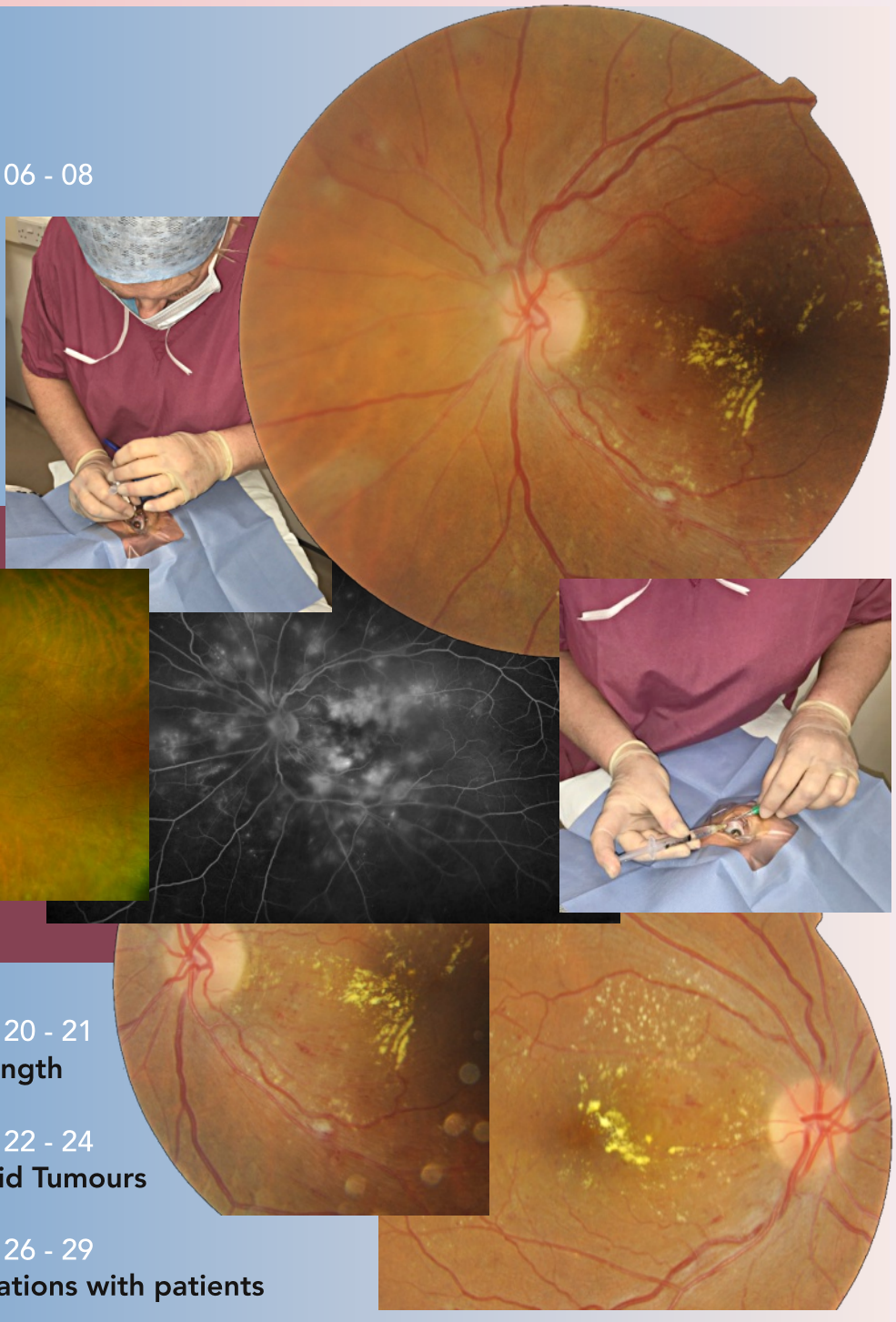
DEJ
Diabetic Eye Journal

ISSN 2055-1282
September 2019 / **Issue 13**





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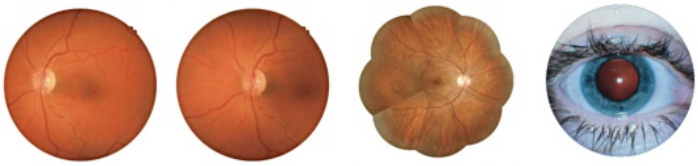

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# DiabeticEyeJournal

Welcome to our Autumnal issue of DEJ! In our last edition we introduced the topic of Benign eye tumours. This is now followed by the second instalment about Malignant eye tumours. The NHS reports that around 750 cases are diagnosed in the UK on a yearly basis, with not all having a favourable prognosis. You can read about these eye conditions in the article by Zine Elhousseini and Susanne Althauser from RFH London in our section on Other Lesions.

The same authors also introduce a relatively new topic, the 'Effect of delayed Anti-VEGF treatment on Diabetic Retinopathy'. What can happen if treatment therapy is interrupted by missed appointments? Early research suggests very fast DR progression, but more data is needed to come to a full conclusion. You will find a couple of case studies in our section on Diabetic Eye Disease.

Retinal Screeners see a vast variety of Eye Disease and different stages of Diabetic Retinopathy cases in their daily practice. With the onset of IRMAs, NVEs or progressive Maculopathies referrals are made to Hospital Eye Services for further examination. One of those is the use of Fluorescein Angiography. Richard Hancock and Indu Kumar from Central Mersey DESP give detailed insight into its origins and clinical uses in the section on Fluorescein Angiography.

Many Screeners are also living with Diabetes and are able to put themselves into the shoes of those we screen. Sometimes the experiences of patients are positive and encouraging, but there are times when the person leaves discouraged, confused and helpless. We would hope that such encounters are few and far between, but in the early days of screening and treatment for Diabetic Retinopathy that might not have been the case. Verity McLelland, who was diagnosed with type 1 diabetes at the age of 6, shares her very personal experiences (good and bad), which can be instrumental in improving interactions in Diabetic Eye Care.

We know that words can be very powerful, not just what we say but how we say it, including our body language and tone of the voice. Diabetes UK has been looking at the importance of the language used by healthcare professionals and some useful ideas are summarised in the article by Dr Susan Aldridge, the editor of Diabetes Update for Professionals.

As always there is much more to delve into, including the double spread by BARS, who make it possible for this Journal to be published. Read more about BARS plans and successes in the centre pages. We hope you are thoroughly enjoying this publication and look forward to your valued feedback. To make sure that you are receiving all the issues, please update your details on your BARS membership page yearly before the month of April.

## In this Issue




EDITOR

**Iveta Olejkova** NCL DESP

PUBLISHER

British Association of Retinal Screening (BARS)

PRODUCTION TEAM

**Jacqueline Mansell**

**Jane Clayson** Hampshire & Isle of Wight DESP

**Richard Bell** NUTH NHS Trust

**Kamran Rajaby** SWL DESP

FRONT COVER IMAGE

Use of Anti-VEGF treatment in patients with Clinically Significant Macular Oedema

ONLINE VERSION, CONTRIBUTIONS

info@diabetic***eye***journal.org

www.diabetic**eye**journal.org

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# Effect of delayed Anti-VEGF treatment on Diabetic Retinopathy

**Zine Elhousseini** MD FRCOPhth and **Susanne Althauser** MD FRCOPhth Royal Free London NHS Foundation Trust

Recently, Protocol S[1] showed the efficacy of treating Proliferative Diabetic Retinopathy patients with monthly Anti-Vascular Epithelial Growth Factor (VEGF) (Ranibizumab) to be non-inferior to conventional Pan Retinal Photocoagulation (PRP) in regressing Neo-vascularization and maintaining visual acuity.

In the United Kingdom, the National Institute for Health and Care Excellence (NICE) has not yet approved the use of anti-VEGF for the treatment of Proliferative Diabetic Retinopathy in NHS hospitals.

We are presenting 2 cases of patients who received Anti-VEGF for Diabetic Maculopathy, then did not attend their follow up appointments and presented with severe progression of their Diabetic Retinopathy.

*We would like to raise the awareness that patients with NPDR who are under Anti-VEGF treatment for Diabetic Macular Oedema and who fail to attend their follow up appointments are at risk of fast progressing proliferative disease.*

## CASE 1:

64-year-old female, presented in July 2018 with right eye visual acuity 6/9 and Clinically Significant Diabetic Macular Oedema (CSMO). OCT showed Central Macular Thickness (CMT) of 485 microns. Fundoscopy showed Moderate Non-Proliferative Diabetic Retinopathy (NPDR), R1M1.

She was started on a course of Anti VEGF (Aflibercept) injections and had three injections up to September 2018.
Then she did not attend her follow up appointments and was seen again in clinic after a 1 year period on July 2019.

Her visual acuity in the left eye, was now reduced to 6/36. Her Diabetic Macula Oedema (DMO) was worse and fundoscopy showed extensive Neo-vascularization of the disc (NVD) and elsewhere (NVE), she was now R3aM1P0. She also had a Vitreous Haemorrhage. See **Figures 1, 2**.

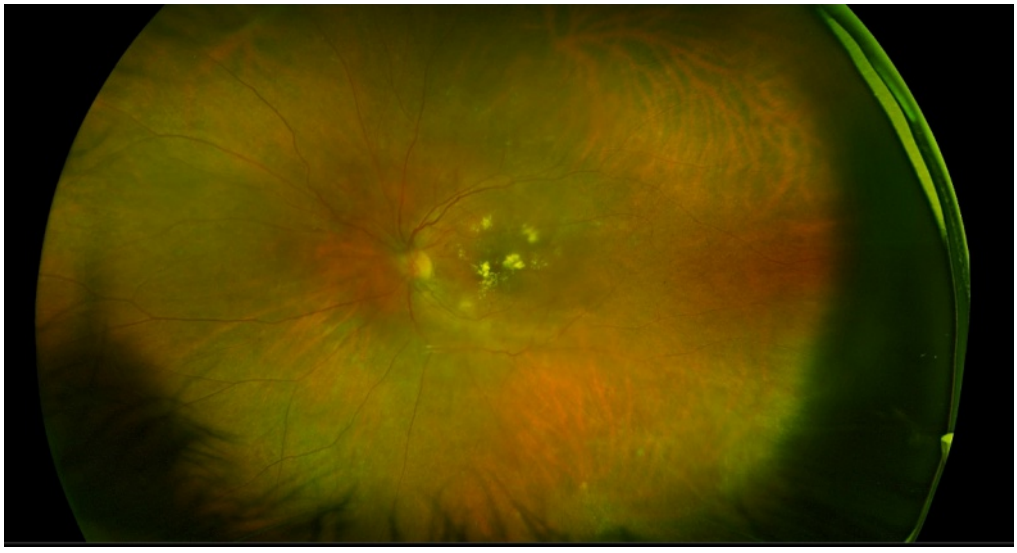

**Figure 1**.
Left eye showing NDV, NVE with extensive exudation in the macula and Vitreous Haemorrhage.

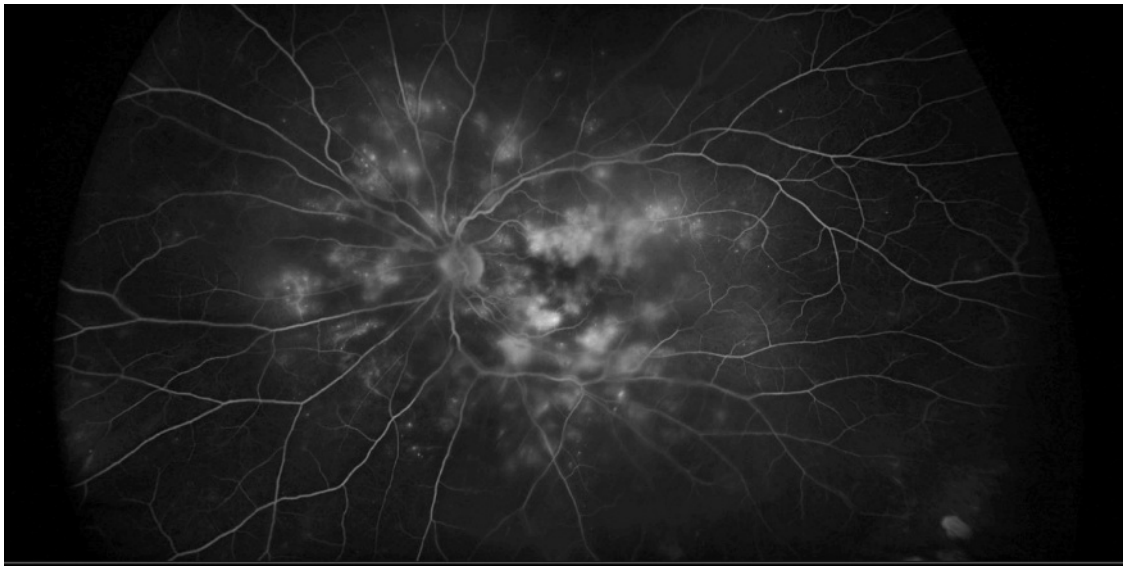

**Figure 2.**
Fluorescein angiography showing leakage from Neovascularization.

## CASE 2:

66 year old male. Seen in clinic in June 2016, with CSMO. Visual acuity in the right eye was 6/24. The OCT showed CSMO and the CMT was 500 Microns. He had moderate Diabetic Retinopathy.

The decision was to start monthly Anti-VEGF (Ranibizumab) treatment in the right eye. Patient received 10 injections, and then failed to attend his follow up appointments for 6 months.

The patient attended the Urgent Care clinic in Oct 2017 with a severe headache and reduction in his right eye vision. Visual acuity was Counting Fingers (C/F) in the right eye and intraocular pressure was 65 mmHg. He had 360 Iris Neovascularization and Neovascular Glaucoma, which was secondary to Proliferative Diabetic Retinopathy.

## Discussion:

Pan Retinal Photocoagulation (PRP) has been the standard treatment to achieve this regression since the Diabetic Retinopathy Study[2] in the 1970s, and this intervention has proven to be highly durable. Blankenship[3] reported that PRP resulted in stable PDR regression for >15 years, with only 4% of patients requiring additional laser treatment.

Unfortunately, in the real-world setting, diabetic patients underuse eye care services and are prone to significant losses to follow-up. This is not always easy to manage as some diabetic patients can become more ill and need hospitalisation for long period and cannot attend their appointments regularly.

Patients can be started on anti-VEGF treatment and then become lost to follow up and there might be a risk for them developing severe complication of Diabetic Retinopathy.

Unfortunately, there are no randomised studies evaluating the effect of prolonged period of stopping Anti-VEGF treatment on the progression of Diabetic Retinopathy after initial treatment apart from only two[4,5] observational studies to our knowledge.

One Observational Study[4], followed 12 patients that were treated for Diabetic Retinopathy with Anti-VEGF and were lost for follow up for a median of 12 months. 5 patients (38%) presented with Neovascular Glaucoma and 9 had Vitreous Haemorrhage. Nearly half of the patients' visual acuity deteriorated to Hand Movement (HM).

We cannot so far prove that there is a relation between the prolonged period between the last anti VEGF treatment and severe re-presentation of the two patients based on current studies. Though, based on clinical observation and multiple anecdotal reports, there might be a continued progression in Diabetic Retinopathy features, moreover 15% of patients progressed in Protocol S[1] despite continuous injection.

Anti-VEGF treatment does improve the clinical outlook, but it might on the other hand be a false reassurance that patients are improving and if we look at FFA, then we can find that non perfusion and retinal ischemia are still present or even worse[6].

In conclusion, clinical teams should play an active role in the compliance and attendance of diabetic patients. Nonetheless, in real world patients can miss follow up appointments, and this could have a devastating effect on their vision either with natural progression of the condition or because it was triggered by the Anti-VEGF treatment. We believe more studies are required to confirm the long term safety of exclusive anti-VEGF treatment for Proliferative Diabetic Retinopathy.

## References:

**1.** Diabetic Retinopathy Clinical Research Network. Panretinal photocoagulation vs intravitreous ranibizumab for proliferative diabetic retinopathy: A randomized trial. JAMA 2015;314:20:2137-2146

**2.** The Diabetic Retinopathy Study Research Group. Photocoagulation treatment of proliferative diabetic retinopathy. Clinical application of Diabetic Retinopathy Study (DRS) findings, DRS Report Number 8. The Diabetic Retinopathy Study Research Group. Ophthalmology 1981;88(7):583–600

**3.** Blankenship GW. Fifteen-year argon laser and xenon photocoagulation results of Bascom Palmer Eye Institute's patients participating in the diabetic retinopathy study. Ophthalmology 1991;98(2):125–128

**4.** Anti–Vascular Endothelial Growth Factor Therapy for Diabetic Retinopathy: Consequences of Inadvertent Treatment Interruptions Wubben, Thomas J.Sohn, Elliott H. et al. American Journal of Ophthalmology, Volume 204, 13 – 18

**5.** Obeid A, Su D, Patel SN, et al. Outcomes of eyes lost to follow-up with proliferative diabetic retinopathy that received panretinal photocoagulation vs intravitreal antivascular endothelial growth factor. Ophthalmology 2019;126(3):407–413

**6.** Bonnin S, Dupas B, Lavia C, et al. Anti-VEGF therapy can improve diabetic retinopathy score without change in retinal perfusion. Retina 2019;39(3):426–434

Western Sussex Hospitals NHS Foundation Trust

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# The West Sussex NHS Diabetic Eye Screening Programme

**The West Sussex Diabetic Eye Screening Programme has an active patient list of approx. 32,000 and covers the Coastal West Sussex area. We have 17 members of staff working in the Programme including Grading Managers, Senior Screening Graders, Screener/Graders, Screeners and a Failsafe and Admin Team led by the Failsafe & Admin Coordinator.**

We refer into Western Sussex Hospitals NHS Foundation Trust, which is rated Outstanding by the Care Quality Commission. The trust delivers outpatient and surgical ophthalmic services at St Richard's Hospital in Chichester, and at a brand new purpose-designed unit in Shoreham-by-Sea called Western Sussex Eye Care | Southlands. We screen at 11 locations including an Open Prison and a Low Secure Unit.


Our Clinical Lead is an Ophthalmologist and our programme comes under the remit of the Care Group Manager for Ophthalmology. Over recent months all clinical activity for diabetic patients attending an outpatient appointment in Ophthalmology is being recorded by the consultant/doctor in clinic directly onto our software, Vector. This has saved a considerable amount of time for the Failsafe Team as previously information was received on a pro-forma and manually entered into the database. This real time update has also now reduced any delay in the system being updated.

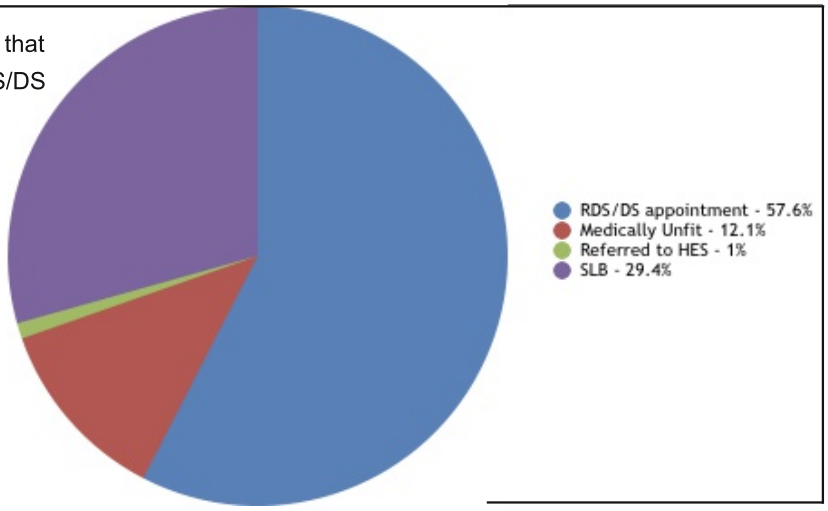
## GP2DRS

We are fully compliant with GP2DRS and are fortunate that all our GP Practices have signed up to this initiative. We have recently received an update from Vector on the management of patients via GP2DRS and are looking forward to using this functionality as it will save a considerable amount of time.

## Nursing Home Assessments

We continue using our Nursing Home Assessment Form which has evolved over the past couple of years and has proved to be a valuable tool for our service. This Form is used to assess the patient's suitability to attend clinic. Last year we undertook 1,775 of these assessments with the outcome shown on the diagram.

This is great news for this cohort of patients as it meant that 42.4% of Nursing Home patients did not arrive at a RDS/DS clinic and find that they were unable to be screened.




## DNA slots

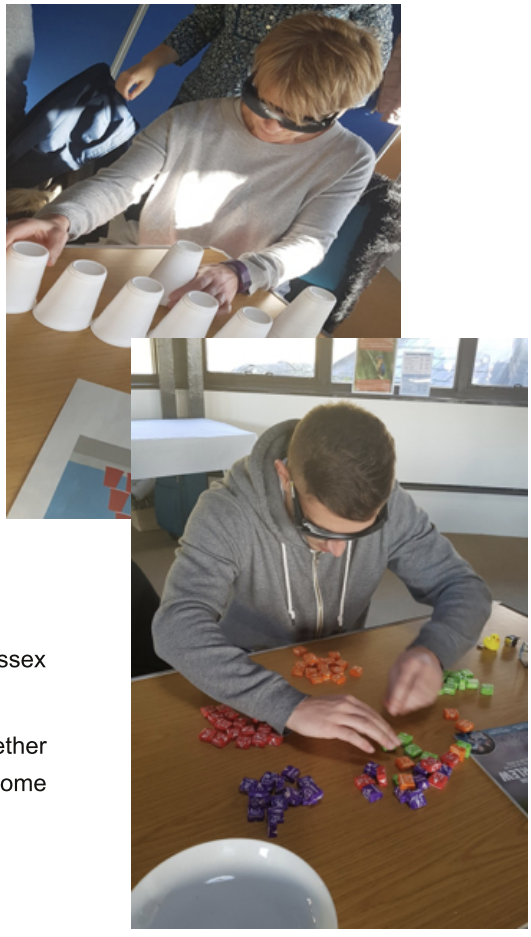
To optimise our clinic capacity we have introduced “DNA slots” into our clinic template. These slots are used for patients who have previously DNA’d two appointments in the past 12-18 months. Our current clinic template is two patients on the hour and two patients on the half hour and we now have a “DNA slot” booked at ten past the hour (maximum of 5 per clinic). Sometimes these patients do attend which is great news but if they haven’t their non-attendance has not impacted on the standard template activity.

## SLB clinics

These are run with existing staff and our Clinical Lead has provided training to the two Grading Managers. We run these clinics at two locations and are hoping to expand this to a third location in the next few months. Our Clinical Lead overseas compliance and governance for the SLB clinics and reviews both members of staff on an annual basis against a set of competencies.

## Team Away Day

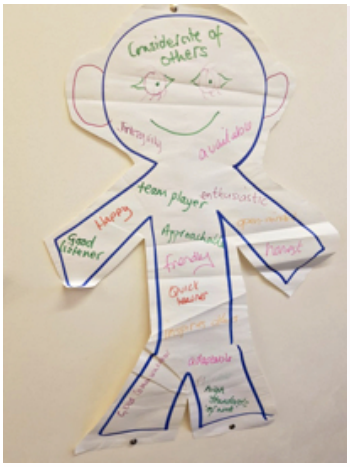
In January 2019 the whole team spent a fun and productive day at the Arundel Wetlands Centre. The morning session covered a range of tasks such as pyramid cup building, constructing a Lego person and sorting out sweets into four colours. These tasks were all undertaken in teams with one member wearing a pair of glasses that emulated an eye condition. The idea was to see how everyone dealt with a simple task whilst being hindered by tunnel vision due to glaucoma, tunnel vision and a cataract, a cataract and diabetic retinopathy.



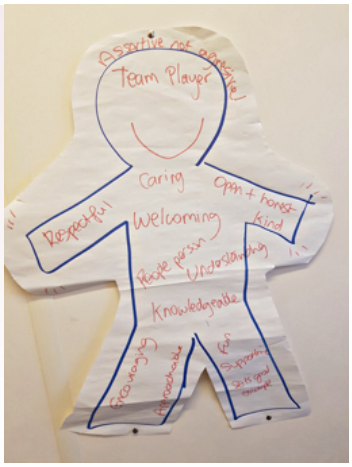
All tasks were timed and the team that completed them all in the quickest time were awarded a prize. After the tasks were completed a feedback session took place where members of the team were asked how they felt whilst completing these simple tasks and what barriers their patients could be facing and how, we as a programme could ensure that patients were supported when attending their screening appointments.

The afternoon session was run by the Senior Education Fellow at Western Sussex Hospitals NHS Foundation Trust and focused on Team Dynamics and Leadership.

Everyone was given a questionnaire to complete and their answers determined whether their personality type was a Driver, Amiable, Analytical or Expressive. This did give some surprising answers which the team enjoyed discussing!




On each side are a couple of the “Leadership” people produced. Each personality type team were asked to identify their description of what makes a good leader:




The day was enjoyed by everyone and feedback after the event was extremely positive with everyone requesting that this be an annual event. The 2020 Away Day is now being planned!

## OCT

Our CQUIN last year was to introduce OCT clinics and we have continued with this service this year currently without any associated funding but a Business Case is due to be submitted to the Commissioners very shortly. One of our Screener/Graders has previously worked as an Ophthalmic Technician and his experience of operating the OCT has proved invaluable to the success of our CQUIN (Commissioning for Quality and Innovation). He has now been enrolled onto the University Diploma on OCT Interpretation at Gloucester Hospital and will commence his studies in September 2019. He tells me he is very much looking forward to learning more and supporting the programme!

## Improving Uptake

We instigated a project group with our local AAA, Breast and Bowel Screening Programmes to work together to improve uptake. We identified 4 GP practices where each Screening Programme had a low uptake and have since met with the first GP Practice and formulated an improvement plan. We also worked together with these programmes to man a stand at the South of England Show to promote screening. Although the weather was pretty awful a fun time was had by all and engagement with the public proved successful. Attendance at further events as a joint venture are being planned.


The pregnant patients process has been enhanced with the introduction of our **Pregnant Patient Engagement** initiative. One of the Senior Screener/Graders is responsible for ensuring that all pregnant patients on the database at any one time receive a call as soon as they are added to the database and that any appointments are scheduled by them and they are the point of contact for these patients. This initiative is in the early stages and no results are available as yet to assess the impactas this has had.

**Alison Byatt**
Programme Manager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# Diabetic Eye Screening Programme in Northern Ireland

Authors: Laura Cushley, Catherine Jamison, Nicola Quinn, Rosemary Bowles, Tunde Peto and the DESPNI Team

**The Northern Ireland Diabetic Eye Screening Programme (NIDESP) was established in 2008 and is commissioned and quality assured by the Public Health Agency Northern Ireland and is delivered by the Belfast Health and Social Care Trust. DESPNI is a regional system covering all of Northern Ireland.**


**Figure 1**: HSC Trusts Northern Ireland

Source: (https://www.graftonrecruitment.com/clients/health-and-social-care-trusts)

Northern Ireland has a population of approximately 1.87 million people with over 100,000 diagnosed with diabetes. The patients are spread out across five different health and social care trusts – Belfast, Northern, South Eastern, Southern and the Western Health and Social Care Trusts, as shown on the adjacent map.

Throughout the five different trusts, all patients aged 12 and over are offered an appointment at DESPNI with the exception of those who have no perception of light (NPL) in either eye, the terminally ill and those with gestational diabetes. Annual screening appointments are to be offered, except to those under the care of hospital eye services (HES) if at least yearly diabetic eye examination takes place and if this is reported back to NIDESP. Those who are in the digital surveillance or slit lamp pathway might be offered more frequent appointments.

Just like in every other DESP in the UK, NIDESP aims to detect diabetic eye disease at an early stage and prevent sight loss in those with diabetes aged 12 years and over in Northern Ireland. Northern Ireland adopted the UK National Standards in 2017, and is in the process of working towards achieving those.

Screening in Northern Ireland is undertaken using predominantly mobile vans, equipped with nationally approved digital screening cameras, taken to GP surgeries or larger health and social care sites. The camera might move daily to a new location if a GP's patient base is exhausted in a day, or if they can only provide accommodation for a day. Alternatively, the camera might stay in the same location until all patients are seen from that particular surgery. While this approach sounds inherently convenient for patients, GPs are facing extreme demands on their floorspace with an increasing number of services being pushed back to primary care; this problem is compounded by the fact that NI has a very poor public transport system and so people drive long distances to work and to reach any services. So if someone lives in one part of NI, but works in another, the limited number of days when the screening camera is stationed in their GP's surgery might not suit them at all. In response to growing demand, there are limited number of static sites in strategic locations, and patients who cannot attend their GP's surgery and those requiring more frequent monitoring are able to attend such sites. Mobile annual screening is provided in the Belfast, North, South and South Eastern Trusts, while the Western Trust has six fixed sites where diabetic eye screening is provided.

## Programme Team

**The diabetic eye screening team consists of a team of screeners and graders, some of whom are optometrists employed to carry out screening/grading activities. Of course none of it would be possible without the relevant administrative and failsafe team. The clinical lead is Professor Tunde Peto, Consultant Clinical Ophthalmologist and Professor of Clinical Ophthalmology at Queen's University Belfast, supported by a team of clinicians and also by the Belfast Trust. The team is based in Forster Green Hospital and screener/graders travel throughout Northern Ireland to complete screening visits. Aside from routine screening clinics, staff undertake imaging for digital surveillance and some carry out additional slit lamp clinics. As a team, we screened 45 000 patients and provided timely image analysis and referral for those episodes.**

## The invitation and screening process

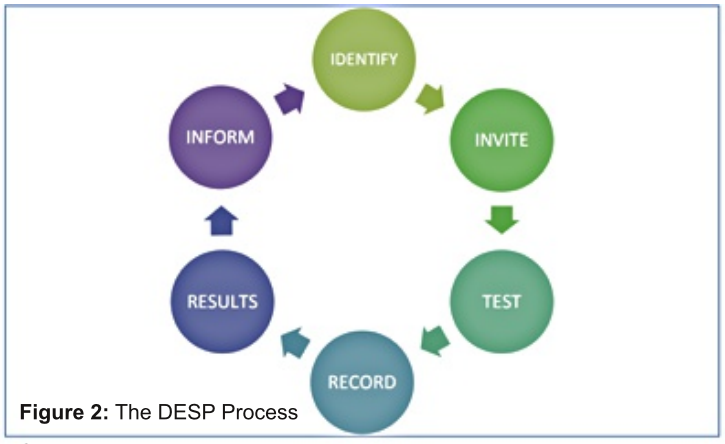


**Figure 2:** The DESP Process
Source: Public Health Agency

Before patients are invited to their diabetic eye screening appointment, the administrative team work with individual GP practices to arrange a suitable date for the screening of their patients. Following this, each patient receives a letter of invitation to the screening clinic. When patients attend the clinic, they are dilated using Tropicamide (if they are over 50 years of age) and then two or more digital photographs are taken of each eye using the national imaging criteria. Their photographs are then uploaded onto the Optomize system and graded accordingly by graders at the base site (Forster Green Hospital), or, if possible, by the screener/grader on the same day. Result letters are then sent to both patients and GPs and where necessary, referrals are to HES.

Should the patient need further investigation due to inadequate image quality (often due to cataract), they are seen in a slit lamp clinic by a Clinical Ophthalmologist to determine their level of Diabetic Retinopathy and to refer them if required. This process is summarised in the table below.

**Figure 3:**
Growing Numbers of Diabetics
Source: Public Health Agency


## Training and Conferences

All screener/graders complete the Certificate of Higher Education for Diabetic Retinopathy Screening from the Gloucester Retinal Education Group and are registered for the monthly International Test and Training set, as being outside of England, they are not eligible for TAT. All staff are encouraged to keep up to date with their training and conference attendances in order to continue to perform high level diabetic screening, these include monthly training activities for the whole team and relevant additional activities.

In addition, all staff are encouraged to attend the 'World Sight Day' conference held within Queen's University Belfast, this one-day event is usually focussed around DESP locally, nationally and internationally. We are very proud of the fact that the 2018's European Association for the Study of Diabetic Eye Complications Conference was held in Belfast, this is the only specialist conference on diabetic eye disease in Europe; Professor Peto is currently the Vice President of the organisation.

## Moving forward needs to be based on audits and data

**There is a lot to do in DEPNI given that UK national standards have only been adopted in 2017 leading to a mountain of issues to be worked through. However, it allows us to re-group and re-think as to how we might best serve the population with the resources we have.**

Northern Ireland is a close-knit community and so it is extremely important that the letters generated by Optomize are acceptable to the patients and their carers. Historically, patients did not receive any feedback on their screening results and therefore, when we started to send results letters, we received a lot of complaints about the wording and in general, as to why these are being sent. Therefore we decided to work with Diabetes UK NI (D-UK NI), to utilise not only their local expertise, but also their patient experience. All results letters sent to patients were scrutinized by D-UK NI and wordings were changed accordingly. These new letters generate less complaints, and even when they do, we can confidently say that the wording was approved by general patient groups. In general, letters are sent on time to patients and GPs.

It was identified that many patients who attend Diabetes Clinics then subsequently fail to attend screening, on questioning, many cited lack of co-location, distance to travel, having to take another day off work/study. In response to that, a DESP camera was placed at the Royal Victoria Hospital, Belfast, Endocrinology Clinic and appointments are booked to coincide with patients' diabetes clinic appointments. This is proving popular with those attending specialist clinics there such as pregnancy in diabetes, foot clinics, high risk patients for any reason and young people. In this latter group, with one year of camera placement, the attendance went from nearly 60% to 94%, and this was achieved without the young people having to take time off from work or school. This result is exceptional in this age-group and further audits and research are required as to how to make such an improvement sustainable, and also, how to cover the province fully with such a service.

Many patients ring up and claim not to have diabetes anymore; there are countless reasons for this, but we need to make sure that these claims are correct, otherwise we might exclude a patient who might still be at risk of visual loss from diabetes. Auditing the 46 patients classified as "no longer diabetic" at the time of acceptance of national standards, 25 of these patients were found to have diabetes, and on screening them, 25% were found to have DR, none sight-threatening. However, these patients are at risk of progression and so continuous audit of that list is truly a vital.

Similarly, patients, their carers and even some health professionals dealing with visually impaired patients, might confuse their status of poor sight with not needing DR screening, especially if their impairment is not due to diabetic eye disease. Auditing the "No perception of light" queue showed that of those 53 patients registered as NPL, only 14 were confirmed as having truly NPL in both eyes, the rest required screening. About 2/3rd of the patients were registered blind, 2 were partially sighted and 3 were eligible for registration. Continuous monitoring and re-auditing of this queue is ongoing.

The NPL audit goes hand-in-hand with the yearly audit of certification of visual impairment in NI; figures from the period of 2014 -2016 showed that out of the 1159 registration in the 3 years studied, 81 patients were certified with a primary diagnosis of diabetes and it was the overall 3rd most common cause of sight loss in NI with the two leading causes being AMD and Glaucoma. Monitoring this trend is vital as with the late adoption of the national guidelines, it is entirely possible that these are under-estimates for diabetes as the AMD and the glaucoma services have been organised a few years ago and have better data for those years.

## Audit of Patients Attending Optometry Led Diabetic Retinopathy Screening Slit-Lamp Clinic in Braid Valley Health and Care Centre (NHSCT)

A retrospective audit on patient attendance and outcomes for the first 6 months of Optometry led Slit-lamp clinics of the NIDESP. Altogether 158 patients were invited, 143 of which attended. Of those attending 113 were referred for cataract, 8 for learning disability or poor compliance, 6 for small pupils and 16 for other conditions such as asteroid hyalosis and keratoconus. Following slit lamp assessment, 17% were referred to HES, 7% were referred for cataract, 2.8% for posterior capsular opacification, 1.5% for asteroid hyalosis and 0.7% for a learning disability severe enough to not allow slit lamp examination. Of the remaining patients, 76.2% remain in the slit lamp clinic with 9.1% returning to annual screening and 2.8% placed in digital surveillance for closer monitoring. Patient satisfaction with the SLB Clinics is high, as it is closer to home and eliminates the long waiting periods to be seen at ophthalmology clinics. We are immensely proud of our collaborative efforts with the diabetes team, an example of achievement is found below.

## Integrating Diabetic Eye Screening in a Haemodialysis Clinic

A cohort audit of patients with diabetes mellitus (PwDM) on dialysis was carried out in the Renal Unit, Belfast City Hospital. Approximately 10-40% of PwDM eventually suffer from kidney failure and will require haemodialysis 3 times a week. This often means they cannot attend their diabetic eye screening appointments. In 2018, 63 PwDM were undergoing haemodialysis at the Renal Unit. Of these, 26 patients needed to be screened then and there, the rest were under the care of hospital eye services, declined screening even at the Dyalisis unit, usually for being too sick to comply with requirements. Of the 26 patients that agreed to screening, 17 had never attended DRS before. It is important to note, that 1:4 patients were found to have PDR that required urgent referral for a treatment. This is an over 100-fold increase of the UK national average of 1:429 requiring urgent treatment. Based on our results, we are working with the other 4 dialysis units in NI to provide similar service.

In summary, the DESPNI has come a long way since October 2015 when a nationally approved software was installed (Optomize) and the 2017 embracement of national standards. However, such late adoption coupled with limited resources is making it difficult to comply with the standards and so we are looking forward to the modernisation of services and the outcomes of the public consultations. The team is working very hard and we are all proud to have achieved this much so far!

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# National update

## Improving grading quality

There is a national aim to improve grading quality across the NHS Diabetic Eye Screening (DES) Programme to:

- reduce variability in screening outcomes between local services
- improve the programme for people with diabetes

The national programme has done a lot of work on validating a method to quality assure the grading of images taken during DES appointments.

We have published new national guidance that describes a statistical method to compare grading outcomes between local providers. This method identifies providers with unusual grading outcomes compared to all the others.

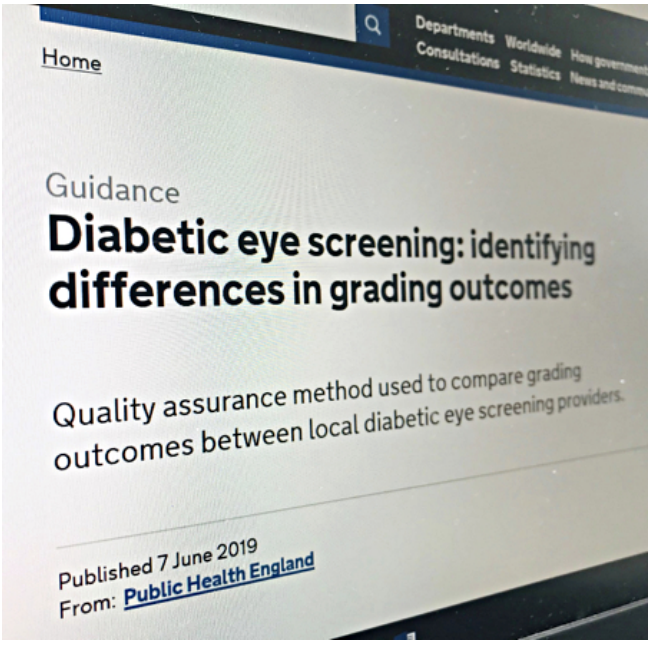
These providers are identified as 'atypical' and might need to improve grading before implementing the UK National Screening Committee recommendation for extended 2-year intervals for people at low risk of developing retinopathy.

We intend to use this guidance as a validated annual quality assurance tool. It will also form part of the quality measures for selecting local providers who will be our 'pathfinders' for the extended screening intervals pathway.

Pathfinder providers are those that will be the first to implement extended intervals and pave the way for all other providers to follow.

The statistical method uses data taken from quarterly reporting submitted to PHE. We will use data submitted for quarter 4 (1 January 2019 to 31 March 2019) to calculate the atypically scoring for the 2018 to 2019 screening year.

The new grading quality report will be ready at the end of September 2019 and will be available to providers, commissioners and the screening quality assurance service (SQAS).




The new national guidance describes the statistical method used to compare grading outcomes between local screening providers

Diabetic eye screening: identifying difference in grading outcomes can now be found on GOV.UK.

All queries should be directed to the PHE Screening helpdesk at phe.screeninghelpdesk@nhs.net.

## Implementation of extended screening intervals

In 2016, the UK National Screening Committee (UK NSC) recommended:

- extending screening intervals for people at low risk of sight loss from one year to 2 years
- retaining current annual screening interval for people at higher risk of sight loss

As a result of the UK NSC recommendation, the extended intervals project has been included in the DES national service specification since last year. Local providers should be 'preparing to implement' with support from the Screening QA Service (SQAS) and commissioners.

Individuals eligibe to transfer to screening every 2 years are those defined as low risk because they have had 2 concurrent R0M0 screening episodes. These episodes must have been between 46 and 58 weeks of each other.

An individual can postpone their screening appointment and still be eligible for biennial screening if the rearranged appointment is no more than 89 days after their due date.

There will be a one-year delay in implementing extended intervals because individuals will need to attend their next scheduled annual appointment before being considered to move to biennial screening.

For example, if a patient had an R0M0 screening result in June 2019 then they would be invited for screening again in June 2020. If their screening result is again R0M0 in June 2020 then the software would transfer them on to biennial screening. However, if their result is R1M0 in June 2020, they would remain on annual screening.

To avoid a pile-up of screening episodes from 2-yearly screening, the software must be able to identify those eligible for extended intervals and assign 50% of them to extended intervals in the first year. This process only needs to be applied in the first year that a local provider implements extended intervals.

Work is ongoing to amend some of the pathway standards and make changes to the software.
Before local providers can implement extended intervals, they will need agreement from their host organisation and commissioners. They must:

- demonstrate, through an action plan, how the impact on staffing will be managed
- explain how the impact on finance will be managed
- have an agreement with their software supplier

## New e-learning module on population screening

PHE recently launched a new e-learning module, Introduction to Population Screening.
The module aims to provide a short, fun and memorable introduction to population screening. It is an informative resource for those working in screening and is also open to members of the public to access without needing to register on the e-Learning for Health website.
There is also a short video available about the module at https://vimeo.com/344805312.

## DES data to be included in National Diabetes Audit from 2020

The National Diabetes Audit (NDA) is a national clinical audit which measures the effectiveness of diabetes healthcare against NICE clinical guidelines and quality standards. The NDA is delivered annually by NHS Digital in partnership with Diabetes UK. It collects and analyses data, producing reports for stakeholders that can then be used to improve the quality of services and health outcomes for people with diabetes.

NICE currently recommends 9 care processes for people with diabetes, 8 of which are already included in the NDA. The ninth is Diabetic Eye Screening which has never been fully included because the complete data is held in local DES systems rather than primary care.

The NHS DES Programme is currently working to address this situation, with the aim of including DES data in the NDA from 2020 onwards. This has involved collaboration with colleagues from NHS Digital, NHS England and Diabetes UK to:

- establish the legal basis and governance for information sharing
- agree the data items to be shared
- agree the method of data transfer

Discussions are under way with the DES software suppliers regarding the functionality needed to provide this information. The national programme has worked to develop a dataset in conjunction with the NDA clinical leads, and is finalising a report specification.

This work is ongoing, but a great deal of progress has been made and we are optimistic that a process will be in place for 2020, allowing full and accurate data to be included in the NDA for the first time. The DES service specification will be updated to reflect this.

Authors: **Shelley Widdowson**, National Grading Lead
**Amanda Grange**, Senior QA Advisor for DES Intervals Implementation
**Tsitsi Muchayingeyi**, National Education Manager
**Phil Gardner**, Screening IT Systems Manager